

AUTOMOTIVE INVENTORY LIST

SAFETY DATA SHEET INDEX

AS OF DECEMBER 2015

<u>SIZE</u>	<u>PRODUCT</u>
1 GAL	3M BOOTH COATING
1 QT	3M GENERAL PURPLE ADHESIVE CLEANER
1 QT	3M PERFECTIT POLISHING PAD GLAZE
400 ML	3M WELD THRU COATING
2 QT	409 CLEANER
8 OZ	A/C PRO PAG100 REFRIGERANT OIL W/ICE32 (ONLY MSDS SHEET FOUND)
1 QT	ACM FP301 ETCHING PRIMER (ONLY MSDS SHEET FOUND)
14 OZ	ADVANCE AUTO PARTS RED & TACKY #2 LITHIUM GREASE
15 OZ	ADVANCE AUTO PARTS HEAVY DUTY ENGINE BRITE DEGREASER
5 QT	ADVANCE AUTO PARTS POWER STEERING FLUID FOR OEM APPLICATIONS (ONLY MSDS SHEET FOUND)
16 OZ	ALUMASEAL RADIATOR STOP LEAK
8 OZ	AMERICAN RACING WHEEL FLUID (NO SHEET FOUND)
32 OZ	ARCAL WELD-0 WELDING PREP FOR ALUMINUM
2 QT	ARMOUR ALL WASH & WAX
10 OZ	ATP FRICTION MODIFIER FOR TRANSMISSION FLUID
10 OZ	ATP M FIVE ALTERNATE TRANS FLUID CONVERTER
14 OZ	AUTO-ZONE BRAKE CLEANER (ONLY MSDS SHEET FOUND)
1 QT	B&M TRICK SHIFT TRANS FLUID (NO SHEET FOUND)
14.1 OZ	BERNZOMATIC MAPP GAS (ONLY MSDS SHEET FOUND)
5.5 OZ	BERNZOMATIC BUTANE
12 OZ	BIG A TEMP CONTROL VACUUM PUMP OIL
1 GAL	BLEACH (HYVEE)
14.5 OZ	BLK MAGIC TIRE CLEANER
13 OZ	BOWMAN BATTERY TERMINAL PROTECTOR (ONLY MSDS SHEET FOUND)
1 QT	BRAD PENN 30W BREAK IN OIL
10 OZ	BRITE TOUCH PAINT (SPRAY) (ONLY MSDS SHEET FOUND)
32 OZ	BRM HONING OIL
1 GAL	CARQUEST ANTI-FREEZE/COOLANT
14 OZ	CARQUEST BRAKE PARTS CLEANER
1 QT	CARQUEST DEX/MERC TRANS FLUID
5 QT	CARQUEST SAE 5W-20 MOTOR OIL
1 QT	CARQUEST SAE 5W-30 MOTOR OIL
5 QT	CARQUEST SAE 5W-30 MOTOR OIL
1 QT	CASTROL SYNTEC GEAR OIL SAE 75W-90
1 QT	CASTROL TRANSMAX ATF +4 FLUID (FOR CHRYSLERS)
1 QT	CASTROL TRANSMAX v FLUID (FOR CHRYSLERS) (NO SHEET FOUND)
1 QT	CASTROL TRANSMAX V FLUID (FOR FORDS) (NO SHEET FOUND)
1 GAL	COASTAL POWER CLEANER FOR GLASS
4 OZ	COMP CAMS CAM & LIFTER INSTALL LUBE (ONLY MSDS SHEET FOUND)
1 GAL	COSTAL AW32 HYDRAULIC & JACK OIL (ONLY MSDS SHEET FOUND)
7.5 OZ	CRC BELT CONDITIONER
4 OZ	CRC DISC BRAKE QUIET
11.5 OZ	CRC FREEZE-OFF PENETRANT
10 OZ	CRC LITHIUM GREASE (WHITE)
11 OZ	CRC QD ELECTRONIC CLEANER
10 OZ	CRC (STALUBE) EXTREME PRESSURE ENGINE ASSEMBLY LUBE
12 OZ	CRC THREAD CUTTING OIL & THREAD CUTTING LUBRICANT
18 OZ	CSC SUPER PENETRANT PENETRATING OIL & MOISTURE REMOVER (ONLY MSDS SHEET FOUND)
1 PT	DIMENSION DH654 HARDENER
1 QT	DIMENSION DR634 REDUCER (NO SHEET FOUND)
16 OZ	DR. TRANNY ASSEMBLY GOO TRANSMISSION ASSEMBLY GREASE (ONLY MSDS SHEET FOUND)

13.25 OZ	DR. TRANNY LUBE GUARD (KOOLER KLEEN) TRANSLINE CLEANER
12 OZ	DUPLICOLOR ENGINE PAINT (FORD BLUE)
1 GAL	DUPLICOLOR LACQUER THINNER
8 OZ	DUPLICOLOR PERFECT MATCH AUTO PAINT
12 OZ	DUPLICOLOR SELF ETCHING PRIMER
17 OZ	DUPLICOLOR UNDERCOAT PAINT (RUBBERIZED & SOUND ELIMINATOR)
12 OZ	DUPLICOLOR WHEEL COATING
1 QT	DUPONT STEEL REFINISHING STEP B (224S) CONVERSION COATING (NO SHEET FOUND)
8 OZ	DYKEM (RED) LAY-OUT FLUID (AEROSOL & BULK)
5 OZ	EAGLE ONE METAL POLISH (NANO-POLISH METAL POLISH)
32 OZ	EASTWOOD ANTIRUST PAINT (ONLY MSDS SHEET FOUND)
1 QT	ETP CUTTING FLUID (GOLD CUTTING FLUID)
16.9 OZ	FEBREEZE FABRIC FRESHNER
15 OZ	GUARDMAN FUEL INJECTOR CLEANER (NO SHEET FOUND)
8 OZ	HASTINGS (TECH AIR) AUTO TOOLS OIL
14 OZ	HOT SHOT FLYING INSECT & BUG KILLER
4 OZ	HOUSE OF COLOR PIN STRIPING PAINT (NO SHEET FOUND)
12.3 OZ	ID QUEST R-134A WITH UV LEAK DETECTOR (AIR COND.) (NO SHEET FOUND)
32 OZ	IG-10 REFRIGERANT OIL 150
20 OZ	IMPORTANT 4 CYCLE MOTOR OIL SAE 30 DETERGENT BLEND (NO SHEET FOUND)
1 QT	JOE GIBBS DRIVEN RACING OIL (ONLY MSDS SHEET FOUND)
1 QT	JOHNSEN'S HYDRAULIC JACK OIL
1 QT	JOHNSON WAX GLASS CLEANER (NO SHEET FOUND)
10 OZ	JOHNSON'S SILICONE LUBRICANT (NO SHEET FOUND)
32 OZ	K&W MOTOR FLUSH (DISCONTINUED ITEM; NO SHEET FOUND)
1 QT	KLEAN STRIP AIRCRAFT PAINT REMOVER
1 GAL	KLEAN STRIP MURIATIC ACID
32 OZ	KOP-COAT SPLASH ZONE COMPOUND (BLK) (NO SHEET FOUND)
32 OZ	KOP-COAT SPLASH ZONE COMPOUND (YELLOW) (NO SHEET FOUND)
12 OZ	LIFE LEATHER, VINYL, RUBBER CLEANER (NO SHEET FOUND)
16 OZ	LPS CUTTING FLUID
10 OZ	LUBRIPLATE #105 MOTOR ASSEMBLY GREASE (NO SHEET FOUND)
32 OZ	LUCAS SAE 80W-90 GEAR OIL
32 OZ	LUCAS UPPER CYLINDERS LUBE (ONLY MSDS SHEET FOUND)
32 OZ	MASTER PRO 80W-90 GEAR OIL
1 QT	MASTER PRO GEAR OIL SAE 75W-90 (NO SHEET FOUND)
1 LB	(MPURP) WHEEL BEARING GREASE
5 QT	MOBIL 1 10W-30 OIL (NO SHEET FOUND)
1 QT	MOBIL SPECIAL 5W-20 OIL (NO SHEET FOUND)
5 QT	MOPAR ATF +2 TYPE 7176 TRANS FLUID (UPGRADED TO ATF +4)
1 QT	NAPA 15422 2K FAST FILLING HARDENER (UPGRADED TO 80ZCH254 CROSSFIRE HARDENER)
.5 PT	NAPA 56B 45754 PAINT AUTO (CROSSFIRE PLATINUM)
1 GAL	NAPA 8009 REDUCER (QUIK-SEAL) HS ACTIVATING REDUCER
1 GAL	NAPA 8832 MEDIUM REDUCER (ACRYLIC ENAMEL REDUCER)
1 QT	NAPA 99L-187/WHITE ACRYLIC ENAMEL (NO SHEET FOUND)
16 OZ	NAPA AIR TOOL LUBRICANT #765-1400
1 GAL	NAPA AUTO PAINT (MORE INFO NEEDED)
1 QT	NAPA AUTOMOTIVE METAL CLEANER 6877 TRIPLE ETCH (UPGRADED TO 6383 - KLEANZ-EASY SOLVENT)
11.75 OZ	NAPA BATTERY TERMINAL PROTECTOR
11 OZ	NAPA CRC POWER LUBE
1 GAL	NAPA CROSSFIRE CR233 PAINT REDUCER (MEDIUM) (ONLY MSDS SHEET FOUND)
2.58 LBS	NAPA FIBERSTRAND BODY FILLER (NO SHEET FOUND)
1 QT	NAPA GEAR OIL SAE 80W-85W
15 OZ	NAPA PAINTERS GUIDE COAT
4.5 OZ	NAPA PERMATEX SURFACE PREP
1 QT	NAPA PREMIUM ATF FLUID
1 QT	NAPA QT 5102 PRIMER/SEALER (NO SHEET FOUND)
1 QT	NAPA TEC/SYSTEM ACRYLIC URETHANE 5155 TEC HARDNER

1 QT	NAPA TEC/SYSTEM ACRYLIC URETHANE TS-3 TEC SOLVENT #3
1 QT	NAPA VACUUM PUMP OIL
1 PT	NAPA WHITE PAINT (AUTO) 99L-1871 TECSS (NO SHEET FOUND)
20 OZ	NORTH AMERICAN GLASS CLEANER (NO SHEET FOUND)
8 OZ	NORTH AMERICAN GLASS POLISH (NO SHEET FOUND)
12 OZ	NOX-ICE (PENRAY) 5112 GAS LINE ANTI-FREEZE
1 GAL	O'REILLY ANTI-FREEZE/COOLANT
1 GAL	PARKS LIQUID DEGLOSSER (DISCONTINUED ITEM; NO SHEET FOUND)
1.5 OZ	PERMATEX 2 FORM A GASKET SEALANT 2A
8 OZ	PERMATEX ANTI-SEIZE LUBRICANT ADVANCED FORMULA (ALUMINUM)
1.22 OZ	PERMATEX HIGH STRENGTH THREAD LOCKER RED
4 OZ	PERMATEX HIGHTACK GASKET SEALANT
1.22 OZ	PERMATEX MED STRENGTH THREADLOCKER BLUE
3 OZ	PERMATEX REDRTV GASKET MAKER
5 OZ	PERMATEX THE RIGHT STUFF ONE MINUTE GASKET
5 GAL	PHOENIX TIRE & TUBE MOUNTING COMPOUND
11 OZ	POLAR PREMIUM STARTING FLUID
32 OZ	POSI-FLOW 2000 PARTING & POLISHING MACHINING (NO SHEET FOUND)
1 GAL	PPG ACRYLIC CLEAN WAX & GREASE REMOVER (NO SHEET FOUND; NEED PRODUCT CODE)
32 OZ	PRESTA CHROMA SWIRL REMOVER BUFFING SOLUTION
1 GAL	PRESTONE ANTI-FREEZE/COOLANT
11 OZ	PRESTONE RADIATOR FLUSH & CLEANER COOLING SYSTEM 10 MINUTE FLUSH
11 OZ	PRESTONE COOLING SYSTEM SEALER & STOP LEAK
1 QT	PURE GUARD NON DETERGENT ND-30 OIL
1 GAL	PURPLE POWER (CLEAN LITE) CLEANER DEGREASER
32 OZ	PX3 75W-90 GEAR OIL (DISCONTINUED ITEM; NO SHEET FOUND)
1 GAL	RAMPAC HYDRAULIC OIL FOR SMALL JACKS (DISCONTINUED ITEM; NO SHEET FOUND)
1 LB	RAYBESTOS MULTI PURPOSE PRECISION LUBRICANT
4 OZ	RECTORSEAL TPLUS2 THREAD SEALANT
8 OZ	ROYAL PURPLE MAX TUFF ASSEMBLY LUBE
1 QT	ROYAL PURPLE MAX GEAR OIL SAE 75W-90
16 OZ	ISOPROPYL RUBBING ALCOHOL (70%)
12 OZ	RUSTOLEUM (HAMMERED) PAINT (NEED SPECIFIC COLOR; BLACK PRINTED)
1 GAL	SAFE SOLUTIONS EVAPO-RUST
1 QT	SHELL ROTELLA T6 SYNTHETIC OIL 5W-40
1LB	SHEP'S STICK BELT PROCESSING (NO SHEET FOUND)
32 OZ	SLIME SDS TIRE SEALANT
15 OZ	SOLDER SEAL 10 MINUTE ACTING SYSTEM FLUSH (NO SHEET FOUND)
15 OZ	SPARTAN STAINLESS STEEL POLISH/CLEANER
1 GAL	SPLASH ORIGINAL BLUE WINSHIELD WASHER
14 OZ	(STA-LUBE) HI TEMPERATURE DISC BREAK BEARING GREASE
32 OZ	STABIL (GOLD EAGLE) FUEL STABILIZER
1 QT	(STA-LUBE) SAE 80W-90 SLIP GEAR OIL
15 OZ	STP OIL TREATMENT
16 OZ	TAP MAGIC CUTTING FLUID FOR ALUMINUM
1 GAL	TEXACO HAVOLINE ANTI-FREEZE/COOLANT
16 OZ/1 LB	TRANS JEL RED TRANSMISSION ASSEMBLY LUBE
14 OZ	TRU-FLATE RUBBER CLEANER
1 QT	VALSPAR CATALYST URETHANE ENAMEL SYSTEM KU150 (UPC CODE NEEDED; NO SHEET PRINTED)
1 QT	VALSPAR HOUSE OF COLOR BLACK PAINT (UPC CODE NEEDED; NO SHEET PRINTED)
1 GAL	VALSPAR HOUSE OF COLOR BLACK PRIMER (UPC CODE NEEDED; NO SHEET PRINTED)
1 GAL	VALSPAR HOUSE OF COLOR RU-311 MED REDUCER (UPC CODE NEEDED; NO SHEET PRINTED)
1 QT	VALVOLINE (IN CAN) TYPE F AUTOMATIC TRANSMISSION FLUID
13 OZ	VALVOLINE CARB & CHOKE CLEANER (THROTTLE BODY SPRAY HEAVY DUTY)
1 GAL	VALVOLINE EXTENDED LIFE ANTI/FREEZE/COOLANT DEXPOOL GM APPROVED 5 YR-150,000 MILE PROTECTION (ONLY MSDS SHEET FOUND)
12 OZ	VALVOLINE FULE INJECTOR CLEANER
5 QT	VALVOLINE FULL SYNTHETIC SAE 5W-30 MOTOR OIL

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance

Hydrocarbons
Carbon monoxide
Carbon dioxide

Condition

During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent

material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid skin contact with hot material. For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep from freezing. Store away from acids. Store away from strong bases. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
5-chloro-2methyl-4isothiazoline-3-one	26172-55-4	CMRG	TWA:0.076 mg/m ³ ;STEL:0.23 mg/m ³	Sensitizer
2-methyl-4-isothiazoline-3-one	2682-20-4	CMRG	TWA:1.5 mg/m ³ ;STEL:4.5 mg/m ³	Sensitizer
Glycerin	56-81-5	OSHA	TWA(as total dust):15 mg/m ³ ;TWA(respirable fraction):5 mg/m ³	
Ethyl Alcohol	64-17-5	ACGIH	STEL:1000 ppm	A3: Confirmed animal carcin.
Ethyl Alcohol	64-17-5	OSHA	TWA:1900 mg/m ³ (1000 ppm)	
Methyl Alcohol	67-56-1	ACGIH	TWA:200 ppm;STEL:250 ppm	Skin Notation
Methyl Alcohol	67-56-1	OSHA	TWA:260 mg/m ³ (200 ppm)	
Vinyl Acetate-Vinyl Alcohol Polymer	Trade Secret	CMRG	TWA(as respirable dust):5 mg/m ³ ;TWA(as total dust):10 mg/m ³	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Provide appropriate local exhaust ventilation on open containers.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields
Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Butyl Rubber

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

Thermal hazards

Wear heat insulating gloves when handling hot material to prevent thermal burns.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

General Physical Form:	Liquid
Odor, Color, Grade:	Slight solvent odor clear liquid
Odor threshold	<i>No Data Available</i>
pH	6
Melting point	<i>Not Applicable</i>
Boiling Point	212 °F
Flash Point	> 200
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Vapor Pressure	18 mmHg
Vapor Density	1.2 [<i>Ref Std: AIR=1</i>]
Density	1.02 g/ml
Specific Gravity	1.02 [<i>Ref Std: WATER=1</i>]
Solubility in Water	Complete
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	50 - 60 centipoise
Hazardous Air Pollutants	0.01 lb HAPS/lb solids [<i>Test Method: Calculated</i>]
Volatile Organic Compounds	0.5 % weight [<i>Test Method: calculated per CARB title 2</i>]
Volatile Organic Compounds	5 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>]

Percent volatile
VOC Less H₂O & Exempt Solvents

86.6 % weight
41 g/l [*Test Method:* calculated SCAQMD rule 443.1]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong bases
Strong oxidizing agents
Strong acids

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Vapors from heated material may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Sprayed material may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

Vapors from heated material may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Sprayed material may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Additional Health Effects:**Reproductive/Developmental Toxicity:**

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Carcinogenicity:

Ingredient	CAS No.	Class Description	Regulation
Generic: ALCOHOLIC BEVERAGES	64-17-5	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Generic: ALCOHOLIC BEVERAGES	64-17-5	Known human carcinogen	National Toxicology Program Carcinogens

Additional Information:

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Glycerin	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
Glycerin	Ingestion	Rat	LD50 > 5,000 mg/kg
Ethyl Alcohol	Dermal	Rabbit	LD50 > 15,800 mg/kg
Ethyl Alcohol	Inhalation-Vapor (4 hours)	Rat	LC50 124.7 mg/l
Ethyl Alcohol	Ingestion	Rat	LD50 17,800 mg/kg
Methyl Alcohol	Dermal		LD50 estimated to be 1,000 - 2,000 mg/kg
Methyl Alcohol	Inhalation-Vapor		LC50 estimated to be 10 - 20 mg/l
Methyl Alcohol	Ingestion		LD50 estimated to be 50 - 300 mg/kg
5-chloro-2methyl-4isothiazoline-3-one	Dermal	Rabbit	LD50 87 mg/kg
5-chloro-2methyl-4isothiazoline-3-one	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.33 mg/l
5-chloro-2methyl-4isothiazoline-3-one	Ingestion	Rat	LD50 40 mg/kg
2-methyl-4-isothiazoline-3-one	Dermal	Rabbit	LD50 87 mg/kg
2-methyl-4-isothiazoline-3-one	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.33 mg/l
2-methyl-4-isothiazoline-3-one	Ingestion	Rat	LD50 40 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
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Glycerin	Rabbit	No significant irritation
Ethyl Alcohol	Rabbit	No significant irritation
Methyl Alcohol	Rabbit	Mild irritant
5-chloro-2methyl-4isothiazoline-3-one	Rabbit	Corrosive
2-methyl-4-isothiazoline-3-one	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Glycerin	Rabbit	No significant irritation
Ethyl Alcohol	Rabbit	Moderate irritant
Methyl Alcohol	Rabbit	Moderate irritant
5-chloro-2methyl-4isothiazoline-3-one	Rabbit	Corrosive
2-methyl-4-isothiazoline-3-one	Rabbit	Corrosive

Skin Sensitization

Name	Species	Value
Glycerin	Guinea pig	Not sensitizing
Ethyl Alcohol	Human	Some positive data exist, but the data are not sufficient for classification
Methyl Alcohol	Guinea pig	Not sensitizing
5-chloro-2methyl-4isothiazoline-3-one	Human and animal	Sensitizing
2-methyl-4-isothiazoline-3-one	Human and animal	Sensitizing

Photosensitization

Name	Species	Value
5-chloro-2methyl-4isothiazoline-3-one	Human and animal	Not sensitizing
2-methyl-4-isothiazoline-3-one	Human and animal	Not sensitizing

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Ethyl Alcohol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Ethyl Alcohol	In vivo	Some positive data exist, but the data are not sufficient for classification
Methyl Alcohol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Methyl Alcohol	In vivo	Some positive data exist, but the data are not sufficient for classification
5-chloro-2methyl-4isothiazoline-3-one	In vivo	Not mutagenic
5-chloro-2methyl-4isothiazoline-3-one	In Vitro	Some positive data exist, but the data are not sufficient for classification
2-methyl-4-isothiazoline-3-one	In vivo	Not mutagenic
2-methyl-4-isothiazoline-3-one	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
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Glycerin	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
Ethyl Alcohol	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Methyl Alcohol	Inhalation	Multiple animal species	Not carcinogenic
5-chloro-2methyl-4isothiazoline-3-one	Dermal	Mouse	Not carcinogenic
5-chloro-2methyl-4isothiazoline-3-one	Ingestion	Rat	Not carcinogenic
2-methyl-4-isothiazoline-3-one	Dermal	Mouse	Not carcinogenic
2-methyl-4-isothiazoline-3-one	Ingestion	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Glycerin	Ingestion	Not toxic to female reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerin	Ingestion	Not toxic to male reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerin	Ingestion	Not toxic to development	Rat	NOAEL 2,000 mg/kg/day	2 generation
Ethyl Alcohol	Inhalation	Not toxic to development	Rat	NOAEL 38 mg/l	during gestation
Ethyl Alcohol	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5,200 mg/kg/day	prematuring & during gestation
Methyl Alcohol	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,600 mg/kg/day	21 days
Methyl Alcohol	Ingestion	Toxic to development	Mouse	LOAEL 4,000 mg/kg/day	during organogenesis
Methyl Alcohol	Inhalation	Toxic to development	Mouse	NOAEL 1.3 mg/l	during organogenesis
5-chloro-2methyl-4isothiazoline-3-one	Ingestion	Not toxic to female reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
5-chloro-2methyl-4isothiazoline-3-one	Ingestion	Not toxic to male reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
5-chloro-2methyl-4isothiazoline-3-one	Ingestion	Not toxic to development	Rat	NOAEL 15 mg/kg/day	during organogenesis
2-methyl-4-isothiazoline-3-one	Ingestion	Not toxic to female reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
2-methyl-4-isothiazoline-3-one	Ingestion	Not toxic to male reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
2-methyl-4-isothiazoline-3-one	Ingestion	Not toxic to development	Rat	NOAEL 15 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ethyl Alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 2.6 mg/l	30 minutes
Ethyl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available

Ethyl Alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL not available	
Ethyl Alcohol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg	
Methyl Alcohol	Inhalation	blindness	Causes damage to organs	Human	NOAEL Not available	occupational exposure
Methyl Alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
Methyl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	6 hours
Methyl Alcohol	Ingestion	blindness	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
Methyl Alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
5-chloro-2methyl-4isothiazoline-3-one	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
2-methyl-4-isothiazoline-3-one	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Glycerin	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.91 mg/l	14 days
Glycerin	Inhalation	heart liver kidney and/or bladder	All data are negative	Rat	NOAEL 3.91 mg/l	14 days
Glycerin	Ingestion	endocrine system hematopoietic system liver kidney and/or bladder	All data are negative	Rat	NOAEL 10,000 mg/kg/day	2 years
Ethyl Alcohol	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 124 mg/l	365 days
Ethyl Alcohol	Inhalation	hematopoietic system immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/l	14 days
Ethyl Alcohol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8,000 mg/kg/day	4 months
Ethyl Alcohol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg/day	7 days
Methyl Alcohol	Inhalation	liver	All data are negative	Rat	NOAEL 6.55 mg/l	4 weeks
Methyl Alcohol	Inhalation	respiratory system	All data are negative	Rat	NOAEL 13.1 mg/l	6 weeks
Methyl Alcohol	Ingestion	liver nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	90 days

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 1 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M™ General Purpose Adhesive Cleaner PN 08984, 08986

Product Identification Numbers

60-4550-3067-0, 60-4550-4586-8, 62-4787-6509-2, 62-4787-8509-0, 62-4787-9509-9

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Adhesive Remover

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Automotive Aftermarket
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

2.1. Hazard classification

Flammable Liquid: Category 2.
Skin Corrosion/Irritation: Category 2.
Aspiration Hazard: Category 1.
Reproductive Toxicity: Category 1B.
Carcinogenicity: Category 2.
Specific Target Organ Toxicity (single exposure): Category 1.
Specific Target Organ Toxicity (central nervous system): Category 3.
Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

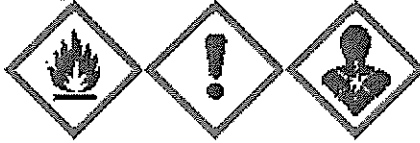
Signal word

Danger

Symbols

Flame | Exclamation mark | Health Hazard |

Pictograms



Hazard Statements

Highly flammable liquid and vapor.

Causes skin irritation.
May be fatal if swallowed and enters airways.
May cause drowsiness or dizziness.
May damage fertility or the unborn child.
Suspected of causing cancer.

Causes damage to organs:
sensory organs |

Causes damage to organs through prolonged or repeated exposure:
nervous system |

May cause damage to organs through prolonged or repeated exposure:
sensory organs |

Precautionary Statements

General:

Keep out of reach of children.

Prevention:

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Keep container tightly closed.
Use explosion-proof electrical/ventilating/lighting equipment.
Do not breathe dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves and eye/face protection.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Do NOT induce vomiting.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Call a POISON CENTER or doctor/physician if you feel unwell.
In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place. Keep cool.
Keep container tightly closed.
Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Hazards not otherwise classified

None.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Xylene	1330-20-7	30 - 60 Trade Secret *
Hydrotreated Light Naphtha (Petroleum)	64742-49-0	30 - 60 Trade Secret *
Ethylbenzene	100-41-4	7 - 13 Trade Secret *
Toluene	108-88-3	0.5 - 1.5 Trade Secret *
Benzene	71-43-2	< 0.1 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If Swallowed:

Do not induce vomiting. Get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Protect from sunlight. Store away from heat. Store away from acids. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Ethylbenzene	100-41-4	ACGIH	TWA:20 ppm	A3: Confirmed animal carcin.
Ethylbenzene	100-41-4	CMRG	TWA:25 ppm;STEL:75 ppm	
Ethylbenzene	100-41-4	OSHA	TWA:435 mg/m3(100 ppm)	
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin
Toluene	108-88-3	CMRG	STEL:75 ppm	Skin Notation
Toluene	108-88-3	OSHA	TWA:200 ppm;CEIL:300 ppm	
Xylene	1330-20-7	ACGIH	TWA:100 ppm;STEL:150 ppm	A4: Not class. as human carcin
Xylene	1330-20-7	CMRG	TWA:50 ppm;STEL:75 ppm	
Xylene	1330-20-7	OSHA	TWA:435 mg/m3(100 ppm)	
Hydrotreated Light Naphtha (Petroleum)	64742-49-0	CMRG	TWA:50 ppm	
Benzene	71-43-2	ACGIH	TWA:0.5 ppm;STEL:2.5 ppm	A1: Confirmed human carcin., Skin Notation
Benzene	71-43-2	OSHA	TWA:1 ppm;TWA:10 ppm;STEL:5 ppm;CEIL:25 ppm	29 CFR 1910.1028

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls**8.2.1. Engineering controls**

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)**Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Fluoroelastomer
Polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Liquid
Odor, Color, Grade:	Colorless, sharp odor of aromatic solvent
Odor threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Boiling Point	245 °F
Flash Point	52 °F [<i>Test Method: Closed Cup</i>]
Evaporation rate	Approximately 7.1 [<i>Ref Std: ETHER=1</i>]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	0.90 % volume
Flammable Limits(UEL)	6.00 % volume
Vapor Pressure	15 mmHg [<i>Details: CONDITIONS: @ 100F</i>]
Vapor Density	>=3.00 [<i>Ref Std: AIR=1</i>]
Density	0.808 g/ml
Specific Gravity	0.808 [<i>Ref Std: WATER=1</i>]
Solubility in Water	Negligible
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	3 centipoise [<i>Test Method: Brookfield</i>]
Hazardous Air Pollutants	3.44 lb HAPS/gal [<i>Test Method: Calculated</i>]
Volatile Organic Compounds	808 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>]
Volatile Organic Compounds	100.0 % weight [<i>Test Method: calculated per CARB title 2</i>]
Percent volatile	100 % weight
VOC Less H2O & Exempt Solvents	808 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat
Sparks and/or flames

10.5. Incompatible materials
Strong oxidizing agents

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

Skin Contact:

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion:

Chemical (Aspiration) Pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and may be fatal.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause target organ effects:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Benzene	71-43-2	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Benzene	71-43-2	Known human carcinogen	National Toxicology Program Carcinogens
Benzene	71-43-2	Cancer hazard	OSHA Carcinogens
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Hydrotreated Light Naphtha (Petroleum)	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrotreated Light Naphtha (Petroleum)	Inhalation-Vapor (4 hours)	Rat	LC50 > 14.7 mg/l
Hydrotreated Light Naphtha (Petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
Xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
Xylene	Inhalation-Vapor (4 hours)	Rat	LC50 29 mg/l
Xylene	Ingestion	Rat	LD50 3,523 mg/kg
Ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
Ethylbenzene	Inhalation-Vapor (4 hours)	Rat	LC50 17.4 mg/l
Ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-Vapor (4 hours)	Rat	LC50 30 mg/l
Toluene	Ingestion	Rat	LD50 5,550 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Hydrotreated Light Naphtha (Petroleum)	Rabbit	Irritant
Xylene	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Mild irritant
Toluene	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Hydrotreated Light Naphtha (Petroleum)	Rabbit	Mild irritant

Xylene	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Moderate irritant
Toluene	Rabbit	Moderate irritant

Skin Sensitization

Name	Species	Value
Hydrotreated Light Naphtha (Petroleum)	Guinea pig	Not sensitizing
Ethylbenzene	Human	Not sensitizing
Toluene	Guinea pig	Not sensitizing

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Hydrotreated Light Naphtha (Petroleum)	In Vitro	Not mutagenic
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Hydrotreated Light Naphtha (Petroleum)	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Xylene	Dermal	Rat	Not carcinogenic
Xylene	Ingestion	Multiple animal species	Not carcinogenic
Xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic
Toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Xylene	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Xylene	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	during organogenesis

Xylene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	during gestation
Ethylbenzene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 4.3 mg/l	prematuring & during gestation
Toluene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.3 mg/l	1 generation
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
Toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse

Lactation

Name	Route	Species	Value
Xylene	Ingestion	Mouse	Does not cause effects on or via lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Hydrotreated Light Naphtha (Petroleum)	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Hydrotreated Light Naphtha (Petroleum)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Xylene	Inhalation	auditory system	Causes damage to organs	Rat	LOAEL 6.3 mg/l	8 hours
Xylene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Xylene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Xylene	Inhalation	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.5 mg/l	not available
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 250 mg/kg	not applicable
Ethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Ethylbenzene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
Toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 0.004 mg/l	3 hours
Toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Xylene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/l	4 weeks
Xylene	Inhalation	auditory system	May cause damage to organs through prolonged or repeated exposure	Rat	LOAEL 7.8 mg/l	5 days
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Inhalation	heart endocrine system hematopoietic system muscles kidney and/or bladder respiratory system	All data are negative	Multiple animal species	NOAEL 3.5 mg/l	13 weeks
Xylene	Ingestion	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 900 mg/kg/day	2 weeks
Xylene	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,500 mg/kg/day	90 days
Xylene	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system nervous system respiratory system	All data are negative	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Ethylbenzene	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	2 years
Ethylbenzene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	103 weeks
Ethylbenzene	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.4 mg/l	28 days
Ethylbenzene	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.4 mg/l	5 days
Ethylbenzene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3.3 mg/l	103 weeks
Ethylbenzene	Inhalation	bone, teeth, nails, and/or hair muscles	All data are negative	Multiple animal species	NOAEL 4.2 mg/l	90 days
Ethylbenzene	Inhalation	heart immune system respiratory system	All data are negative	Multiple animal species	NOAEL 3.3 mg/l	2 years
Ethylbenzene	Ingestion	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 680 mg/kg/day	6 months
Toluene	Inhalation	auditory system nervous system eyes olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for	Rat	LOAEL 2.3 mg/l	15 months

			classification			
Toluene	Inhalation	heart liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system vascular system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
Toluene	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	28 days
Toluene	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	4 weeks

Aspiration Hazard

Name	Value
Hydrotreated Light Naphtha (Petroleum)	Aspiration hazard
Xylene	Aspiration hazard
Ethylbenzene	Aspiration hazard
Toluene	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. As a disposal

alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Ethylbenzene	100-41-4	7 - 13
Xylene	1330-20-7	30 - 60

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
Ethylbenzene	100-41-4	Carcinogen
Toluene	108-88-3	Female reproductive toxin
Toluene	108-88-3	Developmental Toxin
Benzene	71-43-2	Male reproductive toxin
Benzene	71-43-2	Carcinogen
Benzene	71-43-2	Developmental Toxin

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

WARNING: This product contains a chemical known to the State of California to cause cancer.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 3 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 2 Flammability: 3 Physical Hazard: 0 Personal Protection: B

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

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Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M™ PERFECT-IT™ II FOAM POLISHING PAD GLAZE - DARK, 05996, 05986, 39009, 39809

Product Identification Numbers

60-4100-0962-9, 60-4100-0973-6, 60-4400-9509-3, 60-4400-9520-0, IA-2601-6140-0, IA-2601-6141-8, IA-2701-0058-8

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Removal of imperfections from painted surface.

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Automotive Aftermarket
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

2.1. Hazard classification

Flammable Liquid: Category 4.

Skin Sensitizer: Category 1.

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark |

Pictograms



Hazard Statements

Combustible liquid.

May cause an allergic skin reaction.

Precautionary Statements

General:

Keep out of reach of children.

Prevention:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 Avoid breathing dust/fume/gas/mist/vapors/spray.
 Wear protective gloves and eye/face protection.
 Contaminated work clothing must not be allowed out of the workplace.

Response:

IF ON SKIN: Wash with plenty of soap and water.
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place. Keep cool.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Hazards not otherwise classified

None.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Water	7732-18-5	40 - 70 Trade Secret *
Hydrotreated Light Petroleum Distillates	64742-47-8	10 - 30 Trade Secret *
Aluminum Oxide	1344-28-1	5 - 10 Trade Secret *
Decamethylcyclopentasiloxane	541-02-6	3 - 7 Trade Secret *
Dodecamethylcyclohexasiloxane	540-97-6	1 - 5 Trade Secret *
Ceramic Materials and Wares, Chemicals	66402-68-4	1 - 5 Trade Secret *
White Mineral Oil (Petroleum)	8042-47-5	0.5 - 1.5 Trade Secret *
Ethylene oxide, polymer with ethylenediamine and propylene oxide	26316-40-5	<= 0.6 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Formaldehyde	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Oxides of Nitrogen	During Combustion

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Store away from acids. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin
Aluminum Oxide	1344-28-1	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Aluminum Oxide	1344-28-1	CMRG	TWA:1 fiber/cc	
Decamethylcyclpentasiloxane	541-02-6	CMRG	TWA:10 ppm	
Kerosine (petroleum)	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., Skin Notation
Hydrotreated Light Petroleum Distillates	64742-47-8	CMRG	TWA:165 ppm	
White Mineral Oil (Petroleum)	8042-47-5	CMRG	TWA:5 mg/m3;STEL:10 mg/m3	
MINERAL OILS, HIGHLY-REFINED OILS	8042-47-5	ACGIH	TWA(inhalable fraction):5 mg/m3	A4: Not class. as human carcin
Paraffin oil	8042-47-5	OSHA	TWA(as mist):5 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Neoprene
Nitrile Rubber

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - Neoprene

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Liquid
Specific Physical Form:	Emulsion
Odor, Color, Grade:	Slight solvent odor, grey liquid
Odor threshold	<i>No Data Available</i>
pH	7.5 - 8.5
Melting point	<i>Not Applicable</i>
Boiling Point	375 °F
Flash Point	170 °F [<i>Test Method: Closed Cup</i>]
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Vapor Pressure	<i>No Data Available</i>
Vapor Density	<i>No Data Available</i>
Density	0.96 g/ml
Specific Gravity	0.96 [<i>Ref Std: WATER=1</i>]
Solubility in Water	Negligible
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>

Autoignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	16,000 - 20,000 centipoise
Hazardous Air Pollutants	0.0009 lb HAPS/lb solids [Test Method: Calculated]
Volatile Organic Compounds	14.8 % weight [Test Method: calculated per CARB title 2]
Volatile Organic Compounds	145 g/l [Test Method: calculated SCAQMD rule 443.1]
Percent volatile	82 % weight
VOC Less H2O & Exempt Solvents	405 g/l [Test Method: calculated SCAQMD rule 443.1]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic Skin Reaction

(non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE > 12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Hydrotreated Light Petroleum Distillates	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrotreated Light Petroleum Distillates	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 3.0 mg/l
Hydrotreated Light Petroleum Distillates	Ingestion	Rat	LD50 > 5,000 mg/kg
Aluminum Oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Decamethylcyclopentasiloxane	Dermal	Rabbit	LD50 > 15,000 mg/kg
Decamethylcyclopentasiloxane	Inhalation-Dust/Mist (4 hours)	Rat	LC50 8.7 mg/l
Decamethylcyclopentasiloxane	Ingestion	Rat	LD50 > 24,134 mg/kg
Dodecamethylcyclohexasiloxane	Dermal	Rat	LD50 > 2,000 mg/kg
Dodecamethylcyclohexasiloxane	Ingestion	Rat	LD50 > 50,000 mg/kg
Ceramic Materials and Wares, Chemicals	Dermal		LD50 estimated to be > 5,000 mg/kg
Ceramic Materials and Wares, Chemicals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
White Mineral Oil (Petroleum)	Dermal	Rabbit	LD50 > 2,000 mg/kg
White Mineral Oil (Petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
Aluminum Oxide	Rabbit	No significant irritation
Dodecamethylcyclohexasiloxane	Rabbit	No significant irritation
Ceramic Materials and Wares, Chemicals	Rabbit	No significant irritation
White Mineral Oil (Petroleum)	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
Aluminum Oxide	Rabbit	No significant irritation
Dodecamethylcyclohexasiloxane	Rabbit	No significant irritation
Ceramic Materials and Wares, Chemicals	Rabbit	Mild irritant
White Mineral Oil (Petroleum)	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Hydrotreated Light Petroleum Distillates	Guinea	Not sensitizing

White Mineral Oil (Petroleum)	pig Guinea pig	Not sensitizing
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Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Hydrotreated Light Petroleum Distillates	In Vitro	Not mutagenic
Aluminum Oxide	In Vitro	Not mutagenic
Ceramic Materials and Wares, Chemicals	In Vitro	Some positive data exist, but the data are not sufficient for classification
White Mineral Oil (Petroleum)	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Hydrotreated Light Petroleum Distillates	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Aluminum Oxide	Inhalation	Rat	Not carcinogenic
Ceramic Materials and Wares, Chemicals	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
White Mineral Oil (Petroleum)	Dermal	Mouse	Not carcinogenic
White Mineral Oil (Petroleum)	Inhalation	Multiple animal species	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Dodecamethylcyclohexasiloxane	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
Dodecamethylcyclohexasiloxane	Ingestion	Not toxic to male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Dodecamethylcyclohexasiloxane	Ingestion	Not toxic to development	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
White Mineral Oil (Petroleum)	Ingestion	Not toxic to female reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White Mineral Oil (Petroleum)	Ingestion	Not toxic to male reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White Mineral Oil (Petroleum)	Ingestion	Not toxic to development	Rat	NOAEL 4,350 mg/kg/day	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Hydrotreated Light Petroleum Distillates	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Hydrotreated Light Petroleum Distillates	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Aluminum Oxide	Inhalation	pneumoconiosis pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Dodecamethylcyclohexasil oxane	Ingestion	endocrine system liver respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	28 days
Dodecamethylcyclohexasil oxane	Ingestion	nervous system	All data are negative	Rat	NOAEL 1,000 mg/kg/day	28 days
Ceramic Materials and Wares, Chemicals	Inhalation	pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL not available	
Ceramic Materials and Wares, Chemicals	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL not available	occupational exposure
White Mineral Oil (Petroleum)	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,381 mg/kg/day	90 days
White Mineral Oil (Petroleum)	Ingestion	liver immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,336 mg/kg/day	90 days

Aspiration Hazard

Name	Value
Hydrotreated Light Petroleum Distillates	Aspiration hazard
White Mineral Oil (Petroleum)	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Aluminum Oxide	1344-28-1	5 - 10
Aluminum Oxide (ALUMINUM OXIDE (FIBROUS FORMS ONLY))	1344-28-1	5 - 10

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 2 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 2 Flammability: 1 Physical Hazard: 0 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

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Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M™ Weld-Thru II Coating, PN 05917

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Weldable corrosion-resistant coating.

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Automotive Aftermarket
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

2.1. Hazard classification

Flammable Aerosol: Category 2.
Serious Eye Damage/Irritation: Category 2A.
Carcinogenicity: Category 2.
Simple Asphyxiant.
Specific Target Organ Toxicity (single exposure): Category 1.
Specific Target Organ Toxicity (central nervous system): Category 3.
Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Exclamation mark | Health Hazard |

Pictograms



Hazard Statements

Flammable aerosol.

Causes serious eye irritation.
May cause drowsiness or dizziness.
Suspected of causing cancer.
May displace oxygen and cause rapid suffocation.

Causes damage to organs:
cardiovascular system |
sensory organs |

Causes damage to organs through prolonged or repeated exposure:
nervous system |

May cause damage to organs through prolonged or repeated exposure:
sensory organs |

Precautionary Statements

General:

Keep out of reach of children.

Prevention:

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
Do not breathe dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves and eye/face protection.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Specific treatment (see Notes to Physician on this label).
Call a POISON CENTER or doctor/physician if you feel unwell.

Storage:

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

Notes to Physician:

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

2.3. Hazards not otherwise classified

None.

34% of the mixture consists of ingredients of unknown acute oral toxicity.

35% of the mixture consists of ingredients of unknown acute dermal toxicity.

51% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Acetone	67-64-1	30 - 60 Trade Secret *
Liquefied Petroleum Gases	68476-86-8	10 - 30 Trade Secret *
Zinc	7440-66-6	7 - 13 Trade Secret *
Xylene	1330-20-7	3 - 7 Trade Secret *
Ethylbenzene	100-41-4	1 - 5 Trade Secret *
Resin Blend	Trade Secret*	1 - 5 Trade Secret *
Aluminum	7429-90-5	1 - 5 Trade Secret *
Zeolites	1318-02-1	0.1 - 1.5 Trade Secret *
Organophilic Clay	Trade Secret*	0.1 - 1.5 Trade Secret *
Synthetic Amorphous Silica, Fumed, Crystalline Free	112945-52-5	0.1 - 1.5 Trade Secret *
Stoddard Solvent	8052-41-3	0.5 - 1.5 Trade Secret *
Potassium Oxide	12136-45-7	0.1 - 1.5 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. Get medical attention.

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with detergent and water. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store away from amines.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Ethylbenzene	100-41-4	ACGIH	TWA:20 ppm	A3: Confirmed animal carcin.
Ethylbenzene	100-41-4	CMRG	TWA:25 ppm;STEL:75 ppm	
Ethylbenzene	100-41-4	OSHA	TWA:435 mg/m3(100 ppm)	
SILICA, AMORPHOUS	112945-52-5	OSHA	TWA concentration:0.8 mg/m3;TWA:20 millions of particles/cu. ft.	
Aluminum, insoluble compounds	1318-02-1	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin
Xylene	1330-20-7	ACGIH	TWA:100 ppm;STEL:150 ppm	A4: Not class. as human carcin
Xylene	1330-20-7	CMRG	TWA:50 ppm;STEL:75 ppm	
Xylene	1330-20-7	OSHA	TWA:435 mg/m3(100 ppm)	
Acetone	67-64-1	ACGIH	TWA:500 ppm;STEL:750 ppm	A4: Not class. as human carcin
Acetone	67-64-1	OSHA	TWA:2400 mg/m3(1000 ppm)	
Aluminum	7429-90-5	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin
Aluminum	7429-90-5	OSHA	TWA(as Al respirable dust):5 mg/m3;TWA(as Al total dust):15 mg/m3	
Stoddard Solvent	8052-41-3	ACGIH	TWA:100 ppm	
Stoddard Solvent	8052-41-3	OSHA	TWA:2900 mg/m3(500 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Do not remain in area where available oxygen may be reduced. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the

substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polyvinyl Alcohol (PVA)
Polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Liquid
Specific Physical Form:	Aerosol
Odor, Color, Grade:	Gray/Metallic appearance with solvent odor.
Odor threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Boiling Point	<i>Not Applicable</i>
Flash Point	-156 °F [<i>Test Method: Pensky-Martens Closed Cup</i>]
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	0.7 %
Flammable Limits(UEL)	12.8 %
Vapor Pressure	80 - 90 mmHg
Vapor Density	[<i>Details: Heavier than air</i>]
Specific Gravity	0.796 [<i>Ref Std: WATER=1</i>]
Solubility in Water	Appreciable
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	<i>No Data Available</i>
Hazardous Air Pollutants	0.43 lb HAPS/lb solids [<i>Test Method: Calculated</i>]
Volatile Organic Compounds	33.97 % weight [<i>Test Method: calculated per CARB title 2</i>]
Volatile Organic Compounds	270 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>]
Percent volatile	35.64 % weight
VOC Less H ₂ O & Exempt Solvents	530 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Strong acids

Strong bases

Strong oxidizing agents

Amines

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Simple Asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Single exposure, above recommended guidelines, may cause:

Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Prolonged or repeated exposure may cause target organ effects:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Acetone	Dermal	Rabbit	LD50 > 15,688 mg/kg
Acetone	Inhalation-Vapor (4 hours)	Rat	LC50 76 mg/l
Acetone	Ingestion	Rat	LD50 5,800 mg/kg
Liquefied Petroleum Gases	Inhalation-Gas (4 hours)	Rat	LC50 277,000 ppm
Zinc	Dermal	Rabbit	LD50 > 5,000 mg/kg
Zinc	Inhalation-Dust/Mist	Rat	LC50 > 5.4 mg/l
Zinc	Ingestion	Rat	LD50 > 2,000 mg/kg
Xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
Xylene	Inhalation-Vapor (4 hours)	Rat	LC50 29 mg/l
Xylene	Ingestion	Rat	LD50 3,523 mg/kg
Aluminum	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum	Ingestion		LD50 estimated to be > 5,000 mg/kg
Aluminum	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > .888 mg/l
Ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
Ethylbenzene	Inhalation-Vapor (4 hours)	Rat	LC50 17.4 mg/l
Ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg
Stoddard Solvent	Inhalation-Vapor		LC50 estimated to be 20 - 50 mg/l
Stoddard Solvent	Dermal	Rabbit	LD50 > 3,000 mg/kg
Stoddard Solvent	Ingestion	Rat	LD50 > 5,000 mg/kg

Organophilic Clay	Inhalation-Dust/Mist (4 hours)	Not available	LC50 > 5 mg/l
Zeolites	Dermal	Rabbit	LD50 > 2,000 mg/kg
Organophilic Clay	Ingestion	Rat	LD50 > 5,000 mg/kg
Zeolites	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.57 mg/l
Zeolites	Ingestion	Rat	LD50 > 5,000 mg/kg
Synthetic Amorphous Silica, Fumed, Crystalline Free	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic Amorphous Silica, Fumed, Crystalline Free	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic Amorphous Silica, Fumed, Crystalline Free	Ingestion	Rat	LD50 > 5,110 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Acetone	Mouse	Minimal irritation
Liquefied Petroleum Gases	Professional judgement	No significant irritation
Xylene	Rabbit	Mild irritant
Aluminum	Rabbit	No significant irritation
Ethylbenzene	Rabbit	Mild irritant
Stoddard Solvent	Rabbit	Irritant
Zeolites	Rabbit	No significant irritation
Synthetic Amorphous Silica, Fumed, Crystalline Free	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Acetone	Rabbit	Severe irritant
Liquefied Petroleum Gases	Professional judgement	No significant irritation
Xylene	Rabbit	Mild irritant
Aluminum	Rabbit	No significant irritation
Ethylbenzene	Rabbit	Moderate irritant
Stoddard Solvent	Rabbit	No significant irritation
Zeolites	Rabbit	Mild irritant
Synthetic Amorphous Silica, Fumed, Crystalline Free	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Aluminum	Guinea pig	Not sensitizing
Ethylbenzene	Human	Not sensitizing
Stoddard Solvent	Guinea pig	Not sensitizing
Synthetic Amorphous Silica, Fumed, Crystalline Free	Human and animal	Not sensitizing

Respiratory Sensitization

Name	Species	Value
Aluminum	Human	Some positive data exist, but the data are not sufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
------	-------	-------

Acetone	In vivo	Not mutagenic
Acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
Liquefied Petroleum Gases	In Vitro	Not mutagenic
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
Aluminum	In Vitro	Not mutagenic
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
Stoddard Solvent	In vivo	Not mutagenic
Stoddard Solvent	In Vitro	Some positive data exist, but the data are not sufficient for classification
Synthetic Amorphous Silica, Fumed, Crystalline Free	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Acetone	Not Specified	Multiple animal species	Not carcinogenic
Xylene	Dermal	Rat	Not carcinogenic
Xylene	Ingestion	Multiple animal species	Not carcinogenic
Xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic
Stoddard Solvent	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Stoddard Solvent	Inhalation	Human and animal	Some positive data exist, but the data are not sufficient for classification
Synthetic Amorphous Silica, Fumed, Crystalline Free	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Acetone	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
Acetone	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,700 mg/kg/day	13 weeks
Acetone	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5.2 mg/l	during organogenesis
Xylene	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Xylene	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	during organogenesis
Xylene	Inhalation	Some positive developmental data exist, but the data are not sufficient for	Multiple animal	NOAEL Not available	during gestation

		classification	species		
Ethylbenzene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 4.3 mg/l	prematuring & during gestation
Stoddard Solvent	Inhalation	Not toxic to development	Rat	NOAEL 2.4 mg/l	during organogenesis
Synthetic Amorphous Silica, Fumed, Crystalline Free	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic Amorphous Silica, Fumed, Crystalline Free	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic Amorphous Silica, Fumed, Crystalline Free	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

Lactation

Name	Route	Species	Value
Xylene	Ingestion	Mouse	Does not cause effects on or via lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Acetone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Acetone	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 1.19 mg/l	6 hours
Acetone	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL Not available	
Acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Liquefied Petroleum Gases	Inhalation	cardiac sensitization	Causes damage to organs	similar compounds	NOAEL Not available	
Liquefied Petroleum Gases	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Liquefied Petroleum Gases	Inhalation	respiratory irritation	All data are negative		NOAEL Not available	
Xylene	Inhalation	auditory system	Causes damage to organs	Rat	LOAEL 6.3 mg/l	8 hours
Xylene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Xylene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Xylene	Inhalation	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.5 mg/l	not available
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 250 mg/kg	not applicable
Ethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	

Ethylbenzene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
Stoddard Solvent	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Stoddard Solvent	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Stoddard Solvent	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 6.5 mg/l	4 hours

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Acetone	Dermal	eyes	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL Not available	3 weeks
Acetone	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 3 mg/l	6 weeks
Acetone	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 1.19 mg/l	6 days
Acetone	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL 119 mg/l	not available
Acetone	Inhalation	heart liver	All data are negative	Rat	NOAEL 45 mg/l	8 weeks
Acetone	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 900 mg/kg/day	13 weeks
Acetone	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 200 mg/kg/day	13 weeks
Acetone	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3,896 mg/kg/day	14 days
Acetone	Ingestion	eyes	All data are negative	Rat	NOAEL 3,400 mg/kg/day	13 weeks
Acetone	Ingestion	respiratory system	All data are negative	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	muscles	All data are negative	Rat	NOAEL 2,500 mg/kg	13 weeks
Acetone	Ingestion	skin bone, teeth, nails, and/or hair	All data are negative	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
Liquefied Petroleum Gases	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	
Xylene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/l	4 weeks
Xylene	Inhalation	auditory system	May cause damage to organs through prolonged or repeated exposure	Rat	LOAEL 7.8 mg/l	5 days
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Inhalation	heart endocrine system hematopoietic	All data are negative	Multiple animal species	NOAEL 3.5 mg/l	13 weeks

		system muscles kidney and/or bladder respiratory system				
Xylene	Ingestion	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 900 mg/kg/day	2 weeks
Xylene	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,500 mg/kg/day	90 days
Xylene	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system nervous system respiratory system	All data are negative	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Aluminum	Inhalation	nervous system respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Ethylbenzene	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	2 years
Ethylbenzene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	103 weeks
Ethylbenzene	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.4 mg/l	28 days
Ethylbenzene	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.4 mg/l	5 days
Ethylbenzene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3.3 mg/l	103 weeks
Ethylbenzene	Inhalation	bone, teeth, nails, and/or hair muscles	All data are negative	Multiple animal species	NOAEL 4.2 mg/l	90 days
Ethylbenzene	Inhalation	heart immune system respiratory system	All data are negative	Multiple animal species	NOAEL 3.3 mg/l	2 years
Ethylbenzene	Ingestion	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 680 mg/kg/day	6 months
Stoddard Solvent	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 4.6 mg/l	6 months
Stoddard Solvent	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1.9 mg/l	13 weeks
Stoddard Solvent	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.6 mg/l	90 days
Stoddard Solvent	Inhalation	bone, teeth, nails, and/or hair blood liver muscles	All data are negative	Rat	NOAEL 5.6 mg/l	12 weeks
Stoddard Solvent	Inhalation	heart	All data are negative	Multiple animal species	NOAEL 1.3 mg/l	90 days
Synthetic Amorphous Silica, Fumed, Crystalline Free	Inhalation	respiratory system silicosis	All data are negative	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

Name	Value
Xylene	Aspiration hazard
Ethylbenzene	Aspiration hazard
Stoddard Solvent	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	% by Wt
Xylene	1330-20-7	3 - 7
Xylene (Benzene, 1,2-dimethyl-)	1330-20-7	3 - 7
Xylene (Benzene, 1,3-dimethyl-)	1330-20-7	3 - 7
Xylene (Benzene, 1,4-dimethyl-)	1330-20-7	3 - 7
Xylene (Benzene, dimethyl-)	1330-20-7	3 - 7
Aluminum	7429-90-5	1 - 5

Aluminum (Aluminum)	7429-90-5	1 - 5
Ethylbenzene	100-41-4	1 - 5
Zinc	7440-66-6	7 - 13
Zinc (Zinc)	7440-66-6	7 - 13

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
Ethylbenzene	100-41-4	Carcinogen

WARNING: This product contains a chemical known to the State of California to cause cancer.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 4 Instability: 0 Special Hazards: None

Aerosol Storage Code: 2

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Document Group:	18-7877-6	Version Number:	6.00
Issue Date:	03/03/15	Supersedes Date:	03/27/12

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Safety Data Sheet

According to SS586:2014

Formula 409® Antibacterial All-Purpose Cleaner

Version 1.0

Issue date:10/10/2014

Revision date: 10/10/2014

SDS Record Number: CSSS-TCO-010-115561

Section 1 Identification of the substance/mixture and of the company/undertaking

Product identifier:

Identification on the label/Trade name: Formula 409® Antibacterial All-Purpose Cleaner
Additional identification: Not available
Identification of the product: See section 3
Index Number: Not available
REACH registration No.: Not available

Relevant identified uses of the substance and uses advised against:

Identified uses:

Germicidal Cleaner.

Uses advised against:

Not available.

Details of the supplier of the safety data sheet:

Supplier(Manufacturer): The Clorox Company
Address: 1221 Broadway Oakland, CA 94612 USA
Contact person(E-mail): -
Telephone: 1-510-271-7000
Fax: -

Emergency telephone Number:

For Medical Emergencies call: 1-800-446-1014

Transportation Emergencies, call Chemtrec: 1-800-424-9300

Available outside office hours? YES NO

Section 2 Hazards Identification

Classification of the substance/mixture:

GHS Classification Not Classified

label elements:

Hazard Pictograms: No hazard Pictogram is used.
Signal Word(S): No signal word is used.
Hazard Statement: Not applicable.
Precautionary statement: Not applicable.

Other hazards:

Not available.

Section 3 Composition/information on ingredients

Substance/Mixture: Mixture

Product name: Formula 409® Antibacterial All-Purpose Cleaner
Version #: 1.0 Issue date: 10-10-2014. Revision date: 10-10-2014.

SDS EU
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Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
Lauramine oxide	N/A	1643-20-5	216-700-6	1-5%
Alkyl (C12-16) dimethylbenzylammonium chloride	N/A	270-325-2	231-598-3	0.1-1%

Section 4 First aid measures**Description of first aid measures:**

In all cases of doubt, or when symptoms persist, seek medical attention.

In case of inhalation:

Move to fresh air. If symptoms persist, call a physician.

In case of skin contact:

Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.

In case of eyes contact:

Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

In case of ingestion:

Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed:

The product is not classified as harmful to human health effect.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

Section 5 Fire-Fighting measures**Extinguishing media:****Suitable extinguishing media:**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media:

Use of water spray when fighting fire may be inefficient.

Special hazards arising from the substance or mixture

Carbon oxides.

Special fire fighting methods and special protective actions for fire-fighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6 Accidental release measures**Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

For emergency responders:

Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

Environmental Precautions:

Do not allow material to contaminate ground water system. Prevent product from entering drains.

Methods for Containment and Cleaning up:

Prevent further leakage or spillage if safe to do so. Collect and transfer to properly

labeled containers.

Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Additional information:

Not applicable.

Section 7 Handling and storage

Precautions for safe handling:

Protective measures:

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes. Avoid contact with skin. Avoid contact with skin and eyes.

Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities:

Keep containers tightly closed in a dry, cool and well-ventilated place.

Specific end use(s):

Not applicable.

Section 8 Exposure Controls/Personal Protection

Control parameters:

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA:

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Singapore Permissible Exposure Limits of Toxic Substances	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

EMERGENCY LIMITS:

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
Singapore	Not Available	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
Lauryldimethylamine oxide	Not Available	Not Available
benzyl-C12-16-alkyldimethylammonium chloride	Not Available	Not Available

Exposure controls:

Appropriate engineering controls:

Exhaust ventilation should be designed to prevent accumulation and recirculation in the workplace and safely remove carbon black from the air.

Individual protection measures, such as personal protective equipment:

Eye/face protection:

No special protective equipment required.

Hand protection:

No special protective equipment required.

Body protection:

No special protective equipment required.

Respiratory protection:

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Thermal hazards:

Wear suitable protective clothing to prevent heat.

Environmental exposure controls:

According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

Information on basic physical and chemical properties:

Appearance:	Liquid
Colour:	Clear Green
Odour:	Floral Citrus
Odour threshold:	Not available
pH:	10.5
Melting point/range (°C):	Not available
Boiling point/range (°C):	Not available
Flash point (°C):	Not available
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (solid, gas):	Not available
Ignition temperature (°C):	Not available
Upper/lower flammability/explosive limits:	Not available
Vapour pressure (20°C):	Not available
Vapour density:	Not available
Density:	Not available
Bulk density (kg/m³):	Not available
Water solubility (g/l):	Soluble in water.
n-Octanol/Water (log Po/w):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity, dynamic (mPa.s):	Not available
Explosive properties:	Not available
Oxidising properties:	Not available
Molecular Formula:	Not available
Molecular Weight:	Not available

Other information:

Fat solubility(solvent– oil to be specified)	Not available
etc:	
Surface tension:	Not available
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available
Specific gravity:	Not available

Section 10 Stability and reactivity

Reactivity:	The substance is stable under normal storage and handling conditions.
Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
Possibility of hazardous reactions:	No dangerous reactions known.
Conditions to avoid:	Not available.
Incompatible materials:	Not available.
Hazardous decomposition products:	Carbon oxides.

Section 11 Toxicological information

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: Not available

Information on toxicological effects:

Acute toxicity:

LD50(Oral, Rat): Not available

LD50(Dermal, Rabbit): Not available

LC50(Inhalation, Rat): Not available

Skin corrosion/Irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT- single exposure: Not classified

STOT-repeated exposure: Not classified

Section 12 Ecological information

Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability: Not available.

Bioaccumulative potential: Not available.

Mobility in soil: Not available.

Results of PBT&vPvB assessment: Not available.

Other adverse effects: Not available.

Section 13 Disposal considerations

Waste treatment methods: The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

Product / Packaging disposal: If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

Section 14 Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	Not regulated	Not regulated	Not regulated
UN Proper shipping name	Not regulated	Not regulated	Not regulated

Transport hazard Class	Not regulated	Not regulated	Not regulated
Packaging group	Not regulated	I	Not regulated
Environmental hazards	Not regulated	Yes	Not regulated
Special precautions for user	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated	Not regulated	Not regulated

Section 15 Regulation information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

Lauramine oxide	Not available.
Alkyl (C12-16) dimethylbenzylammonium chloride	Not available.

Section 16 Other information

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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Material Safety Data Sheet

MSDS: GPM-7

SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

Company: IDQ Operating Inc. 2901 W Kingsley Dr. Garland, Texas 75041 Phone No.: 1-888-396-0422 CHEMTREC Phone No.: 1-800-424-9300	HAZARD RATING Health: 1 Fire: 1 Reactivity: 0 Special: -- Toxicity: 1	SCALE 0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme
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Product Description: Automotive Refrigerant with Lubrication Oil

Name: Medium Viscosity PAG Lubricant (ISO 100) with ICE 32 for R-134a A/C Systems, 8 oz

Product Code: GPM-7

MSDS Date: 11-19-2010

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

No.	Description	CAS Reg. No.	Units	Amount
1	Polyalkylene Glycol	Trade Secret	% vol	30-90
2	Additive Package	Trade Secret	% vol	10-70

This product contains no known hazardous materials as defined by OSHA hazard communication standard 29 CFR 1910.1200 and SARA 311 and 312.

* Trade secret – proprietary formula. Specific chemical identities are withheld as a trade secret under the provisions of OSHA hazard communication standard 29 CFR 1910.1200.

SECTION 3: HAZARDS INFORMATION

Portals of Entry: Ingestion, eye contact, skin contact, and dermal absorption.

Inhalation: Inhalation of vapor concentrations should not occur at STP conditions.

Eye Contact: Liquid splashes may cause eye irritation.

Skin Contact: Frequent contact can cause skin irritations, dermatitis, oil acne, absorption of certain components can occur.

Ingestion: The product, if ingested, could cause nausea, gastrointestinal disturbances, headaches, drowsiness, vertigo, abdominal pain, and dizziness.

Delayed Effects: Prolonged and repeated overexposure can cause irritation of the respiratory tract and mucous membranes, central nervous system (CNS) effects, blood dysfunction, and kidney effects.

HEALTH EFFECTS FROM OVEREXPOSURE:

Primary Routes of Exposure: Skin contact.

SECTION 4: FIRST AID MEASURES

Inhalation: Inhalation under normal exposure should not cause problems; however if inhalation has resulted in symptoms, move patient to fresh air. If breathing is difficult, give oxygen. Give artificial respiration if breathing has stopped. Get prompt medical attention.

Eye Contact: Immediately flush eyes with a large amount of water for at least 15 minutes. If symptoms exist and/or persist, get prompt medical attention.

Skin Contact: Wash affected skin areas thoroughly with soap and water. Remove contaminated clothing. If skin irritation persists, see a physician.

Ingestion: If swallowed, give large quantities of water to drink. Induce vomiting. Careful gastric lavage may be indicated. Immediately see a physician. Never give anything by mouth nor induce vomiting of an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

Unusual Hazards: Toxic fumes are generated when material is exposed to fire and fire conditions.

Extinguishing Agents: Use the following extinguishing media when fighting fires involving this material: polar solvent foam, carbon dioxide, dry chemical, and water spray. Product is immiscible and insoluble in water and has a lower specific gravity than water; therefore, product will float on water surface.

Personal Protective Equipment: Wear self-contained breathing apparatus and full protective gear.

Special Precautions: Use water spray to cool large containers exposed to fire. Vapors are denser than air and will have a tendency to accumulate in lower areas which can cause the vapors to concentrate and suffocate. If the product is exposed to fire or an ignition source that results in flammability, extinguish with polar solvent foam, carbon dioxide, dry chemical, and water spray.

FIRE AND EXPLOSIVE PROPERTIES:

PROPERTY

Flash Point (°C); [°F]:	176; 348
Auto-Ignition Temperature (°C):	Not Determined
Lower Explosive Limit (ppm):	Not Known
Upper Explosive Limit (ppm):	Not Known

SECTION 6: ACCIDENTAL SPILL OR LEAK RELEASE INFORMATION

Personal Protection: Appropriate protective equipment must be worn when handling a large spill of this material. See the PERSONAL PROTECTION MEASURES Section for recommendations. If exposed to material during clean-up operations, see the FIRST AID PROCEDURES Section for actions to follow.

Procedures: Evacuate the spill area. Floor may be slippery if non-volatile components in product have wetted the floor; use care to avoid falling. Ventilate the spill area. Contain non-volatile material spills immediately with inert adsorption materials. Transfer liquids and solid adsorption materials and diking material to separate suitable containers for recovery or disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

SECTION 7: HANDLING AND STORAGE

Storage Conditions: Store in a cool, well ventilated place. Keep containers dry. Store product away from reactive and corrosive materials. The minimum recommended storage temperature for this material is -29° C/ -20° F. The maximum storage temperature is 49° C/ 120° F.

Handling Procedures: The vapor concentration levels in air need to be kept below occupational exposure limits and kept as low as practicable. Do not mix product with air or oxygen under pressure. Avoid exposure of product to flame or very hot surfaces. Vapors can be evolved when material is being used in processing operations. See FACILITY CONTROL MEASURES Section for types of ventilation required.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Respiratory Protection: A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. If respiratory protection is needed, use, MSHA-NIOSH approved respirator for organic vapors. None required if airborne concentrations are maintained below the TWA/TLV's listed in the COMPONENT EXPOSURE INFORMATION Section.

Up to 10 times the TWA/TLV: Wear a half-mask, air purifying respirator.

Up to 1000 ppm organic vapor: Wear an approved full-face piece, air-purifying respirator.

Above 1000 ppm organic vapor or unknown: Wear an approved positive pressure mode, or an approved full-face piece airline respirator in the positive pressure mode with emergency escape provisions.

Air purifying respirators should be equipped with organic vapor cartridges.

Eye Protection: Use eye goggles and/or face shield.

Hand Protection: The gloves listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection: Polyvinyl alcohol and Viton.

Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.

Other Protection: Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

FACILITY CONTROL MEASURES:

Ventilation: Use normal local exhaust ventilation with a minimum capture velocity of 100 ft/min (30 m/min) at the point of vapor evolution.

Other Protective Equipment: Facilities storing and utilizing this material should be equipped with an eyewash facility and a safety shower.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

TYPICAL PHYSICAL PROPERTIES:

PROPERTY	METRIC UNITS	ENGLISH UNITS
Appearance:	Liquid in Plastic Container	
Color:	Light Amber	Light Amber
State:	Liquid	Liquid
Odor Characteristics:	Ethereal	Ethereal
Viscosity (CP @ 20° C); [CP @ 68° F]:	84-106	84-106
Specific Gravity (d/do 4°C); [d/do 39°F]	1.03	1.03
Density (gr/cm ³); [lb/gal]	1.14	9.48
Vapor Density (Air = 1.0):	9	9
Vapor Pressure (mm Hg @ 20° C); [psia]:	0.01	0.01
Melting Point (°C); [°F]:	NA	NA
Boiling Point (°C); [°F]:	300	572
Solubility in Water (by weight):	88%	88%
Evaporation Rate (n-butyl acetate = 1.0):	NA	NA
pH (product or water extract)	< 8	< 8
Percent Volatility (% wt):	NA	NA

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Thermal Decomposition Products: Thermal decomposition depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: aldehydes, alcohols, ethers and organic acids.

Hazardous Polymerization: Product will not undergo polymerization.

Incompatibility: Avoid contact with strong oxidizing agents, strong acids and strong bases.

SECTION 11: TOXICOLOGICAL INFORMATION

COMPONENT EXPOSURE INFORMATION:

No.	Description	CAS Reg. No.	Units	Max. Amount Amount
1	Polyalkylene Glycol	Trade Secret	% vol	30-90
2	Additive Package	Trade Secret	% vol	10-70

Exposure Information for Specific Component:

No.	Health Flam. Reactivity			Component Units	OSHA		ACGIH			
	Rating	Rating	Rating		TWA	STEL	TWA	STEL	IDLH	HAP
1	0	1	0	ppm	NA	NA	NA	NA	NA	No
2	1	1	0	ppm	NA	NA	NA	NA	NA	No

NA: Not Available; ppm: parts per million

Note: 1 ppm equals 3.8 mg/m³; 5 ppm equals 19 mg/m³; 10 ppm equals 38 mg/m³; 100 ppm equals 380 mg/m³.

SECTION 12: ECOLOGICAL INFORMATION

Persistence and Degradability

Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

Potential to Bioaccumulation: Not expected because of the relatively high water solubility

Biodegradability: Estimated to be less than 40% degradation over a test period of more than 28 days.

SECTION 13: DISPOSAL INFORMATION

WASTE DISPOSAL:

Procedure: For disposal, dispose this material at a facility that complies with local, state, and federal regulations.

SECTION 14: TRANSPORTATION INFORMATION

DOT Hazard Description: Not Regulated

IMDG Hazard Description: Not Regulated

SECTION 15: REGULATORY INFORMATION

EPA Regulation:

SARA SECTION 355/370, and 372: This product does not contain any chemicals subject to reporting requirements of SARA 313.

All components of this product are on the TSCA list.

State Regulations: This product meets requirements of Southern California AQMD Rule 443.1 and Similar Regulations California Proposition 65: This product contains the following chemical known to the State of California to cause cancer: None.

SECTION 16: OTHER INFORMATION

All information, recommendations, and suggestions made by IDQ, Inc. ("Company") appearing herein concerning our product are based upon tests and data believed to be reliable. However, because of the variable characteristics of analytical procedures and samples, and the inability to control its customers' uses of the information and recommendations, or the related products or materials, Company makes NO WARRANTY, EXPRESS OR IMPLIED as to the accuracy of the information or recommendations or that such are fit for any general or specific purpose, whatsoever. Company shall have NO LIABILITY arising from the use by its customers or any third parties of the information and recommendations, and it shall be each customer's sole responsibility to determine the suitability for its own use of any information or recommendations provided by Company.

MATERIAL SAFETY DATA SHEET

FP301
15 00

DATE OF PREPARATION
Mar 25, 2016

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

FP301

PRODUCT NAME

FINISH 1™ Etching Filler Chromate Free

MANUFACTURER'S NAME

ACME AUTOMOTIVE FINISHES

101 Prospect Avenue N.W.

Cleveland, OH 44115

Telephone Numbers and Websites

Regulatory Information	(216) 566-2902
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
2	108-88-3	Toluene		22 mm
		ACGIH TLV	20 PPM	
		OSHA PEL	100 ppm (Skin)	
1	100-41-4	Ethylbenzene		7.1 mm
		ACGIH TLV	20 PPM	
		OSHA PEL	100 PPM	
8	1330-20-7	Xylene		5.9 mm
		ACGIH TLV	100 PPM	
		OSHA PEL	150 PPM STEL	
14	67-63-0	2-Propanol		33 mm
		ACGIH TLV	200 PPM	
		OSHA PEL	400 PPM STEL	
4	78-83-1	2-Methyl-1-propanol		8.7 mm
		ACGIH TLV	50 PPM	
		OSHA PEL	50 PPM	
6	111-76-2	2-Butoxyethanol		0.88 mm
		ACGIH TLV	20 PPM	
		OSHA PEL	25 PPM	
19	108-10-1	Methyl Isobutyl Ketone		16 mm
		ACGIH TLV	50 PPM	
		OSHA PEL	75 PPM STEL	
1	108-21-4	Isopropyl Acetate		47.5 mm
		ACGIH TLV	250 PPM	
		OSHA PEL	310 PPM STEL	
4	84-74-2	Dibutyl Phthalate		5 MG/M3
		ACGIH TLV	5 MG/M3	
		OSHA PEL	5 MG/M3	
5	25068-38-6	Epoxy Polymer		Not Available
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	
12	14807-96-6	Talc		2 mg/m3 as Resp. Dust
		ACGIH TLV	2 mg/m3 as Resp. Dust	
		OSHA PEL	2 mg/m3 as Resp. Dust	
6	13463-67-7	Titanium Dioxide		10 mg/m3 as Dust
		ACGIH TLV	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	
0.2	1333-86-4	Carbon Black		3.5 MG/M3
		ACGIH TLV	3.5 MG/M3	
		OSHA PEL	3.5 MG/M3	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
 EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

HMIS Codes	
Health	2
Flammability	3
Reactivity	0

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.
 Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the hematopoietic (blood-forming) system
- the cardiovascular system

TOXICOLOGY DATA

CAS No.	Ingredient Name			
108-88-3	Toluene	LC50 RAT LD50 RAT	4HR	4000 ppm 5000 mg/kg
100-41-4	Ethylbenzene	LC50 RAT LD50 RAT	4HR	Not Available 3500 mg/kg
1330-20-7	Xylene	LC50 RAT LD50 RAT	4HR	5000 ppm 4300 mg/kg
67-63-0	2-Propanol	LC50 RAT LD50 RAT	4HR	Not Available 5045 mg/kg
78-83-1	2-Methyl-1-propanol	LC50 RAT LD50 RAT	4HR	Not Available 2460 mg/kg
111-76-2	2-Butoxyethanol	LC50 RAT LD50 RAT	4HR	Not Available 470 mg/kg
108-10-1	Methyl Isobutyl Ketone	LC50 RAT LD50 RAT	4HR	Not Available 2080 mg/kg
108-21-4	Isopropyl Acetate	LC50 RAT LD50 RAT	4HR	Not Available 3000 mg/kg
84-74-2	Dibutyl Phthalate	LC50 RAT LD50 RAT	4HR	Not Available 8000 mg/kg
25068-38-6	Epoxy Polymer	LC50 RAT LD50 RAT	4HR	Not Available Not Available
14807-96-6	Talc	LC50 RAT LD50 RAT	4HR	Not Available Not Available
13463-67-7	Titanium Dioxide	LC50 RAT LD50 RAT	4HR	Not Available Not Available
1333-86-4	Carbon Black	LC50 RAT LD50 RAT	4HR	Not Available Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION
No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY. (PAINT OR RELATED).

Larger Containers are Regulated as:

UN1263, PAINT, 3, PG II, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Di-n-butyl phthalate 10 lb RQ
Methyl isobutyl ketone 5000 lb RQ
Xylenes (mixed isomers) 100 lb RQ

Drum Containers may be Shipped as (check reportable quantities):
 RQ, UN1263, PAINT, 3, PG II, (XYLENES (MIXED ISOMERS), DI-N-BUTYL
 PHTHALATE), (ERG#128)
 Canada (TDG)
 UN1263, PAINT, 3, PG II, LIMITED QUANTITY, (ERG#128)

IMO
 5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
 UN1263, PAINT, 3, PG II, (9 C c.c.), EmS F-E, S-E

IMO
 5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.
 UN1263, PAINT, 3, PG II, (9 C c.c.), EmS F-E, S-E

IATA/CAO
 UN1263, PAINT, 3, PG II

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
108-88-3	Toluene	2	
100-41-4	Ethylbenzene	1	
1330-20-7	Xylene	8	
108-10-1	Methyl Isobutyl Ketone	19	
84-74-2	Dibutyl Phthalate	4	
	Zinc Compound	7	4.4
	Glycol Ethers	6	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists. Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

May cause allergic skin reaction in susceptible persons or skin sensitization.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.

If irritation persists or occurs later, get medical attention.

Remove contaminated clothing and launder before re-use.

INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES**FLASH POINT**

48 °F PMCC

LEL

1.0

UEL

12.7

FLAMMABILITY CLASSIFICATION

RED LABEL -- Flammable, Flash below 100 °F (38 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE**STORAGE CATEGORY**

DCL Storage Class IB

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are **FLAMMABLE**. Keep away from heat, sparks, and open flame.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally.

Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION**PRECAUTIONS TO BE TAKEN IN USE**

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PROTECTIVE EQUIPMENT

Use of barrier cream on exposed skin is recommended.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	9.20 lb/gal	1102 g/l
SPECIFIC GRAVITY	1.11	
BOILING POINT	178 - 343 °F	81 - 172 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	74%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)		
	5.05 lb/gal	605 g/l
	5.05 lb/gal	605 g/l
		Less Water and Federally Exempt Solvents
		Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime Inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans. IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint." Carbon Black is classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is insufficient evidence in humans for its carcinogenicity.



Date : 15/02/2015
Version : 1

SAFETY DATA SHEET

Lucas Red "N" Tacky NLGI # 2 grease

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : Lucas Red "N" Tacky NLGI # 2 grease
Product number : 10005, 10027, 10028, 10029, 10574

Product description : Not available.
Product type : Solid.
Other means of identification : Not available.

Only representative : H2 Compliance.
Rubicon Building, CIT Campus,
Bishopstown, Cork, Ireland.
T: +353 21 4868120,
Web page: www.h2compliance.com

1.2 Relevant identified uses of the substance or mixture and uses advised against

Engine oil.

1.3 Details of the supplier of the safety data sheet

Supplier's details : Lucas Oil Products, Inc
302 North Sheridan Street
Corona, California 92880-2067
Toll Free: (800) 342-2512
Tel: (951) 270-0154
Fax: (951) 270-1902
Website: www.LucasOil.com

e-mail address of person responsible for this SDS : Markn@lucasoil.com

1.4 Emergency telephone number

Telephone number : (951) 493-1149
(951) 847-5949

Hours of operation : 7:00A.M. to 5:00P.M. Monday thru Friday





SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Classification according to Directive 1999/45/EC [DPD]

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Not classified.

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : P103 - Read label before use.
P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Risk phrases : This product is not classified according to EU legislation.

Safety phrases : Not applicable.

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : None known.





SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	EC: 272-028-3 CAS: 68649-42-3	>=5 - <10	Xi; R41, R38 N; R51/53	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

See Section 16 for the full text of the R-phrases declared above.

See Section 16 for the full text of the H statements declared above.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.





SECTION 4: First aid measures

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : No specific fire or explosion hazard.
- Hazardous thermal decomposition products** : No specific data.

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : No special precaution is required.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.

6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.





SECTION 6: Accidental release measures

Large spill : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations : Not available.
Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker or exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures





SECTION 8: Exposure controls/personal protection

for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Solid. [Grease.]
Colour : Red.
Odour : Mild. Petroleum oil.
Odour threshold : Not available.





SECTION 9: Physical and chemical properties

pH	: Not applicable.
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: Not available.
Flash point	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Not available.
Vapour pressure	: Not available.
Vapour density	: Not available.
Relative density	: 0.9
Solubility(ies)	: Negligible at 25°C
Solubility in water	: 0 g/l
Partition coefficient: n-octanol/ water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (100°C (212°F)): 0.19 cm ² /s (19 cSt)
Explosive properties	: Not available.
Oxidising properties	: Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: Reactive or incompatible with the following materials: Strong oxidizers.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.





SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	Eyes - Irritant	Rabbit	-	-	-

Sensitisation

There is no data available.

Carcinogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.





SECTION 11: Toxicological information

- Mutagenicity** : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	Acute EC50 1 to 5 mg/L	Algae	96 hours
	Acute EC50 1 to 1.5 mg/L	Crustaceans	48 hours
	Chronic LC50 1 to 5 mg/L	Fish	96 hours

12.2 Persistence and degradability

There is no data available.

12.3 Bioaccumulative potential

There is no data available.

12.4 Mobility in soil

- Soil/water partition coefficient (K_{oc})** : There is no data available.
Mobility : Not available.

12.5 Results of PBT and vPvB assessment

- PBT** : Not applicable.
vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
- Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

Packaging





Lucas Red "N" Tacky NLGI # 2 grease

SECTION 13: Disposal considerations

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
- Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.





SECTION 15: Regulatory information

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Europe inventory : All components are listed or exempted.

Seveso II Directive

This product is not controlled under the Seveso II Directive.

International lists

National inventory

Australia : All components are listed or exempted.
Canada : All components are listed or exempted.
China : All components are listed or exempted.
Japan : Not determined.
Malaysia : Not determined.
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : All components are listed or exempted.
Taiwan : Not determined.
United States : All components are listed or exempted.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 vPvB = Very Persistent and Very Bioaccumulative

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

Full text of abbreviated H statements :	H315 H318 H411	Causes skin irritation. Causes serious eye damage. Toxic to aquatic life with long lasting effects.
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Lucas Red "N" Tacky NLGI # 2 grease

SECTION 16: Other information

Full text of classifications [CLP/GHS]	: Aquatic Chronic 2, H411 Eye Dam. 1, H318 Skin Irrit. 2, H315	LONG-TERM AQUATIC HAZARD - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN CORROSION/IRRITATION - Category 2
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Full text of abbreviated R phrases : R41- Risk of serious damage to eyes.
R38- Irritating to skin.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

History

Date of issue (dd/mm/yyyy) : 15/02/2015

Version : 1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



1. Identification

Product identifier	Engine Brite Heavy Duty Engine Degreaser	
Other means of identification		
SDS number	EB1	
Part No.	EB1, EB1/6	
Tariff code	3814.00.5090	
Recommended use	Engine Degreaser	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	RSC Chemical Solutions	
Address	600 Radiator Road Indian Trail, NC 28079 United States	
Telephone	Customer Service:	(704) 821-7643
	Technical:	(704) 684-1811
Website	www.rscbrands.com	
E-mail	sds@rscbrands.com	
Emergency phone number	Emergency Telephone:	(303) 623-5716
	Emergency Contact:	RMPDC (877-740-5015)

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Category 1
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Aspiration hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	

Label elements



Signal word Danger

Hazard statement Extremely flammable aerosol. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause drowsiness or dizziness. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If swallowed: Immediately call a poison center/doctor. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	95.31% of the mixture consists of component(s) of unknown acute oral toxicity. 2.09% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Petroleum Distillate Aliphatic		68476-34-6	60 - < 70
Kerosine (petroleum)		8008-20-6	20 - < 30
Petroleum naphtha		64742-94-5	3 - < 5
Carbon Dioxide		124-38-9	1 - < 3
Tert-butylbenzene		98-06-6	1 - < 3
NAPHTHALENE		91-20-3	< 1
Other components below reportable levels			5 - < 10

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Alcohol resistant foam. Dry powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable aerosol.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Refer to attached safety data sheets and/or instructions for use. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
Environmental precautions	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Level 3 Aerosol. Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	PEL	9000 mg/m3
NAPHTHALENE (CAS 91-20-3)	PEL	5000 ppm 50 mg/m3
Petroleum naphtha (CAS 64742-94-5)	PEL	10 ppm 400 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
		100 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm	
Kerosine (petroleum) (CAS 8008-20-6)	TWA	5000 ppm	Non-aerosol.
NAPHTHALENE (CAS 91-20-3)	TWA	200 mg/m3	
Petroleum Distillate Aliphatic (CAS 68476-34-6)	TWA	10 ppm	
Petroleum naphtha (CAS 64742-94-5)	TWA	100 mg/m3	Inhalable fraction and vapor.
		200 mg/m3	Non-aerosol.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	STEL	54000 mg/m3
		30000 ppm
	TWA	9000 mg/m3
		5000 ppm
Kerosine (petroleum) (CAS 8008-20-6)	TWA	100 mg/m3
NAPHTHALENE (CAS 91-20-3)	STEL	75 mg/m3
		15 ppm
	TWA	50 mg/m3
		10 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US ACGIH Threshold Limit Values: Skin designation

Kerosine (petroleum) (CAS 8008-20-6)	Can be absorbed through the skin.
NAPHTHALENE (CAS 91-20-3)	Can be absorbed through the skin.
Petroleum Distillate Aliphatic (CAS 68476-34-6)	Can be absorbed through the skin.
Petroleum naphtha (CAS 64742-94-5)	Can be absorbed through the skin.

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection	wear safety glasses with side shields (or goggles)
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	Chemical respirator with organic vapor cartridge and full facepiece if threshold limits are exceeded.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Clear.
Physical state	Liquid.
Form	Aerosol.
Color	Red
Odor	Diesel Fuel odor
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	347 °F (175 °C) estimated
Flash point	136.0 °F (57.8 °C) Tag Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0.7 % estimated
Flammability limit - upper (%)	5 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.64 hPa estimated
Vapor density	Not available.
Relative density	0.834 g/cm3
Solubility(ies)	
Solubility (water)	0.1
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	500 °F (260 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	None known.
Density	7.01 lbs/gal
Explosive properties	Not explosive.
Flame extension	> 37 in
Flammability (flash back)	No
Flammability class	Combustible II estimated
Heat of combustion (NFPA 30B)	39.8 kJ/g
Oxidizing properties	Not oxidizing.
Percent volatile	0.98 % estimated
Specific gravity	0.84
VOC (Weight %)	14.69 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.

Skin contact Causes skin irritation.

Eye contact Causes serious eye irritation.

Ingestion Harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Headache. May cause drowsiness and dizziness. Nausea, vomiting. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. Harmful if inhaled. Narcotic effects.

Components	Species	Test Results
NAPHTHALENE (CAS 91-20-3)		
Acute		
Dermal		
LD50	Rabbit	> 2 g/kg
	Rat	> 20 g/kg
Oral		
LD50	Guinea pig	1200 mg/kg
	Rat	490 mg/kg
Petroleum naphtha (CAS 64742-94-5)		
Acute		
Inhalation		
LC50	Rat	61 mg/l, 4 Hours
Oral		
LD50	Rat	> 25 ml/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

NAPHTHALENE (CAS 91-20-3)

2B Possibly carcinogenic to humans.

Petroleum Distillate Aliphatic (CAS 68476-34-6)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

NAPHTHALENE (CAS 91-20-3)

Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
NAPHTHALENE (CAS 91-20-3)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha) 1.11 - 1.68 mg/l, 96 hours
Petroleum naphtha (CAS 64742-94-5)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia pulex) 2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss) 8.8 mg/l, 96 hours
		8.8 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

NAPHTHALENE	3.3
Tert-butylbenzene	4.11

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. Transport information

DOT

UN number	Not available.
UN proper shipping name	Consumer Commodity
Transport hazard class(es)	
Class	ORM-D
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	T75, TP5
Packaging exceptions	306
Packaging non bulk	304

Packaging bulk 314, 315

IATA

UN number UN1950

UN proper shipping name Aerosols, flammable

Transport hazard class(es)

Class 2.1

Subsidiary risk -

Packing group Not applicable.

Environmental hazards Yes

ERG Code 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed.

Cargo aircraft only Allowed.

IMDG

UN number UN1950

UN proper shipping name AEROSOLS

Transport hazard class(es)

Class 2

Subsidiary risk -

Packing group Not applicable.

Environmental hazards

Marine pollutant Yes

EmS F-D, S-U

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

IATA; IMDG



Marine pollutant



General information IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

NAPHTHALENE (CAS 91-20-3) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
NAPHTHALENE	91-20-3	< 1

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

NAPHTHALENE (CAS 91-20-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Kerosine (petroleum) (CAS 8008-20-6)
NAPHTHALENE (CAS 91-20-3)
Petroleum Distillate Aliphatic (CAS 68476-34-6)
Petroleum naphtha (CAS 64742-94-5)
Tert-butylbenzene (CAS 98-06-6)

US. Massachusetts RTK - Substance List

Carbon Dioxide (CAS 124-38-9)
Kerosine (petroleum) (CAS 8008-20-6)
NAPHTHALENE (CAS 91-20-3)
Tert-butylbenzene (CAS 98-06-6)

US. New Jersey Worker and Community Right-to-Know Act

Carbon Dioxide (CAS 124-38-9)
Kerosine (petroleum) (CAS 8008-20-6)
NAPHTHALENE (CAS 91-20-3)
Petroleum Distillate Aliphatic (CAS 68476-34-6)
Petroleum naphtha (CAS 64742-94-5)
Tert-butylbenzene (CAS 98-06-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Carbon Dioxide (CAS 124-38-9)
Kerosine (petroleum) (CAS 8008-20-6)
NAPHTHALENE (CAS 91-20-3)
Petroleum Distillate Aliphatic (CAS 68476-34-6)
Tert-butylbenzene (CAS 98-06-6)

US. Rhode Island RTK

NAPHTHALENE (CAS 91-20-3)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

NAPHTHALENE (CAS 91-20-3)

Listed: April 19, 2002

Volatile organic compounds (VOC) regulations

EPA

Consumer products Compliant
(40 CFR 59, Subpt. C)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 05-20-2015
Revision date 04-19-2016
Version # 05
HMIS® ratings Health: 2*
 Flammability: 2
 Physical hazard: 0

NFPA ratings Health: 2
 Flammability: 2
 Instability: 0

NFPA ratings



Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Information

Hazard(s) identification: Storage
 Fire-fighting measures: Unsuitable extinguishing media
 Physical & Chemical Properties: Multiple Properties
 Transport information: General information
 GHS: Classification

Initial Preparation Date: 10/27/11

Last Revision Date: 3/5/12

Effective Date: 3/5/12

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTITY: ADVANCE[®] POWER STEERING FLUID

PRODUCT CODE: ELPS007 (1 QUART), ELPS012Z (12 OUNCE)

1. CHEMICAL PRODUCT & COMPANY INFORMATION

OLD WORLD INDUSTRIES, LLC

4065 COMMERCIAL AVENUE

NORTHBROOK, ILLINOIS 60062

PHONE: 847-559-2000

EMERGENCY PHONE: 1-800-424-9300 / 202-483-7616 (CHEMTREC)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Material	CAS Number	% by Weight	OSHA PEL & WA (mist)	TLV (ACGIH) (mist)	ACGIH STEL (mist)	IDLH
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	30-60	5 mg/m ³	5 mg/m ³	10 mg/m ³	N/A

Highly refined mineral oils, additives and dyes. The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

<i>Appearance and Odor: Pale Amber. Liquid. Slight hydrocarbon.</i>
<i>Health Hazards: Not classified as dangerous for supply or conveyance.</i>
<i>Safety Hazards: Not classified as flammable but will burn.</i>
<i>Environmental Hazards: Not classified as dangerous for the environment.</i>

HAZARD RATING SYSTEM

NFPA: HEALTH: 0 FLAMMABILITY: 1 REACTIVITY: 0

KEY: 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

POTENTIAL HEALTH EFFECTS

Not expected to be a health hazard when used under normal conditions.

4. FIRST AID MEASURES

Ensure physician has access to this MSDS.

Routes of Entry: Inhalation, Skin, Eye, Ingestion

Inhalation: Under normal conditions of use, this is not expected to be a primary route of exposure.

Skin Contact: Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin, resulting in disorders such as oil acne / folliculitis.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Low toxicity if swallowed.

Other Information: Used oil may contain harmful impurities.

Signs and Symptoms of Exposure: Oil acne / folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhea.

Aggravated Medical Condition: Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: skin.

Additional Information: Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TREATMENT

Eyes: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

Skin: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

Inhalation: No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.

Ingestion: In general, no treatment is necessary unless large quantities are swallowed; however, get medical advice.

Notes to Physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

FIRE & EXPLOSION HAZARD DATA

Flammable Properties: Combustible at elevated temperatures.

Flash Point: 174° C / 345° F
Method Used: Cleveland Open Cup

Flammability Limits - % of vapor concentration at which product can ignite in presence of spark.

LEL: 1% by volume (typical, based on mineral oil)
UEL: 10% by volume (typical, based on mineral oil)

Auto-ignition Temperature: > 320° C / 608° F

Hazardous Combustion Products: Hazardous combustion products may include: a complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.

Extinguishing Media: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media: Do not use water in a jet.

Fire Fighting Instructions: Clear fire area of all non-emergency personnel.

Protective Equipment For Fire Fighters: Proper protective equipment, including breathing apparatus, must be worn when approaching a fire in a confined space.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment, see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe all relevant local and international regulations.

Protect People: Avoid contact with skin and eyes.

Protect the Environment: Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth or other appropriate barriers.

Cleanup: Slippery when spilt. Avoid accidents; clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

Additional Advice: Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

General Precautions: Use local exhaust ventilation if there is risk of inhalation of vapors, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Handling: Avoid prolonged or repeated contact with skin. Avoid inhaling vapor and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Storage: Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closeable containers. Storage temperature: 0° - 50° C / 32° - 122° F.

Recommended Materials: For containers or container linings, use mild steel or high density polyethylene.

Unsuitable Materials: PVC.

Additional Information: Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

<u>Component</u>	<u>Source</u>	<u>Type</u>	<u>PPM</u>	<u>Exposure Limits</u>	<u>Skin Form</u>
Distillates (petroleum)	ACGIH	TWA (mist)		5 mg/m ³	
hydrotreated light	ACGIH	STEL (mist)		10 mg/m ³	
naphthenic	OSHA Z1	PEL	500 ppm	2,000 mg/m ³	
	OSHA Z1A	TWA	400 ppm	1,600 mg/m ³	

Exposure Controls: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

Respiratory Protection: No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapors [boiling point > 65° C (149° F)].

Skin Protection: Where hand contact with the product may occur, the use of gloves approved to relevant standards (e.g. Europe: EN374, U.S.: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove are dependent on usage, e.g., frequency







Safety Data Sheet

Issue Date: 20-Oct-2012

Revision Date: 23-Jan-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name CARQUEST Power Steering Fluid

Other means of identification

SDS # CQ-001

Synonyms N/A

Recommended use of the chemical and restrictions on use

Recommended Use Power Steering Fluid.

Details of the supplier of the safety data sheet

Supplier Address

Warren Oil Company
915 E. Jefferson Ave.
West Memphis, AR 72301

Emergency Telephone Number

Company Phone Number 1-870-400-3020
Emergency Telephone (24 hr) CHEMTREC 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Appearance Amber liquid

Physical State Liquid at room temperature

Odor Petroleum

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms N/A

Chemical Name	CAS No	Weight-%
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	90-100

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention.
Skin Contact	No treatment is necessary under ordinary circumstances. Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs and persists, seek medical attention. WARNING: Oil injected into the skin from high pressure leaking hydraulic systems can cause severe damage. Most damage occurs during the first few hours. Seek medical attention immediately. Surgical removal of oil may be necessary.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. If breathing is difficult give oxygen. Get medical attention.
Ingestion	If swallowed, DO NOT induce vomiting because of danger of aspirating liquid into lungs. Seek medical attention.

Most important symptoms and effects

Symptoms	This product is irritating to the eyes. This product may cause irritation to the skin. Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis. Inhalation of oil mists or fumes can cause irritation of the nose, throat and upper respiratory tract. Repeated and prolonged overexposure to oil mists may result in droplet deposition, oil granuloma formation, inflammation and increased incidence of infection. If this product is heated over 70 C (155 F) in the presence of water, hydrogen sulfide may be released. Hydrogen sulfide is irritating to the eyes and respiratory system. Continued overexposure may cause respiratory collapse, coma and death without necessarily any warning odor being sensed.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Direct water spray or foam may cause frothing and spattering.

Hazardous Combustion Products Upon decomposition this product may yield oxides of boron, calcium, magnesium, phosphorous, zinc, sulfur including hydrogen sulfide and nitrogen as well as carbon monoxide, carbon dioxide and/or other low molecular weight hydrocarbons.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water to cool fire-exposed containers and to protect personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. Surfaces may become slippery after spillage. Wear appropriate protective equipment and clothing during clean-up. Do not allow the spilled product to enter public drainage systems or open water courses.
Environmental Precautions	See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment	Stop the flow of material, if this is without risk.
Methods for Clean-Up	Absorb with non-flammable suitable absorbent such as sand or earth. Scoop up used absorbent into drums or other appropriate container.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling	Avoid getting this material into contact with your eyes. Avoid prolonged or repeated skin contact with this material. Avoid the generation of oil mists. Wash thoroughly after handling. Use this product with adequate ventilation.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Do not store near heat, sparks, open flame or strong oxidizing agents. Do not store this material in open or unlabeled containers. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode.
Incompatible Materials	This product may react with strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Exposure Guidelines</u>	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies
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Appropriate engineering controls

Engineering Controls	Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces. If product is heated above 70 C (155 F) in the presence of water, hydrogen sulfide vapors may be released. Ventilation should be sufficient to keep hydrogen sulfide levels below recommended exposure limits. Eye wash fountains are recommended.
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Individual protection measures, such as personal protective equipment

Eye/Face Protection	Wear safety glasses. Wear chemical goggles or face shield if splash or mist occurs.
Skin and Body Protection	Use impervious gloves for prolonged contact. Wear oil-impervious garments if contact is unavoidable.
Respiratory Protection	If mist is generated (heating, spraying) and engineering controls are not sufficient, wear approved organic vapor respirator suitable for oil mist.

General Hygiene Considerations Use good hygiene when handling petroleum product. Launder contaminated clothing before reuse. Excessive misting may cause slippery floors - wear appropriate footwear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid at room temperature	Odor	Petroleum
Appearance	Amber liquid	Odor Threshold	Not determined
Color	Amber		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not available	
Melting Point/Freezing Point	Not applicable	
Boiling Point/Boiling Range	Not available	
Flash Point	204 °C / 400 °F	Cleveland Open Cup
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-Not applicable	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	Not available	
Vapor Density	Not available	
Specific Gravity	0.86	at 15.6°C (60°F)
Water Solubility	Negligible	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not available	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not available	
Dynamic Viscosity	Not available	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to Avoid

Avoid formation of mists.

Incompatible Materials

This product may react with strong oxidizing agents.

Hazardous Decomposition Products

Decomposition of this product may yield oxides of boron, calcium, magnesium, nitrogen, phosphorus, sulfur including hydrogen sulfide and zinc as well as carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Do not inhale.
Ingestion	Do not ingest.

Component Information

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

- Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.
- Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

- Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
- DOT** Not regulated
- IATA** Not regulated
- IMDG** Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Petroleum distillates, hydrotreated heavy paraffinic	Present	X		Present		Present	X	Present	X	X

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 311/312 Hazard Categories

- Acute Health Hazard** No
- Chronic Health Hazard** No
- Fire Hazard** No
- Sudden Release of Pressure Hazard** No
- Reactive Hazard** No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

16. OTHER INFORMATION				
<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	0	1	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	1	1	0	Not determined
Issue Date:	20-Oct-2012			
Revision Date:	23-Jan-2015			
Revision Note:	New format			
<u>Disclaimer</u>				
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.				
End of Safety Data Sheet				

□

Gold Eagle Alumaseal Radiator Sealer

Trico Products

Chemwatch: 4780-49

Version No: 2.1.1.1

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: 01/01/2013

Print Date: 01/08/2014

Initial Date: Not Available

S.GHS.AUS.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Gold Eagle Alumaseal Radiator Sealer
Chemical Name	organic vegetable mealy.
Synonyms	Dispenser of 24 x 20g tubes (PN: ASD), Pack Size:, Retail Carded 20g Tube (PN: ASBP)
Proper shipping name	Not Applicable
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Organic based automotive radiator sealer.
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Details of the manufacturer/importer

Registered company name	Trico Products	Gold Eagle
Address	Unit 1, 80 Fairbank Road Clayton 3169 VIC Australia	4400 South Kildare Avenue Chicago 60632 IL United States
Telephone	+61 3 9271 3288	+1 312 376 4400
Fax	+61 3 9271 3290	Not Available
Website	http://www.tricoproducts.com	Not Available
Email	sales@tricoproducts.com.au	marketing@goldeagle.com

Emergency telephone number

Association / Organisation	Not Available	Not Available
Emergency telephone numbers	+61 3 9271 3288	+1 800 535 5053
Other emergency telephone numbers	+61 3 9271 3288	+1 800 535 5053

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability	0	
Toxicity	2	
Body Contact	2	
Reactivity	0	
Corrosive	0	

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme


Poisons Schedule	Not Applicable
GHS Classification ^[1]	Acute Toxicity (Oral) Category 4, Skin Corrosion/Irritation Category 2

Legend:

1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Gold Eagle Alumaseal Radiator Sealer

Label elements

GHS label elements	
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SIGNAL WORD	WARNING
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Hazard statement(s)

H302	Harmful if swallowed
H315	Causes skin irritation

Precautionary statement(s): Prevention

P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s): Response

P321	Specific treatment (see advice on this label).
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water and soap
P330	Rinse mouth.

Precautionary statement(s): Storage

Not Applicable

Precautionary statement(s): Disposal

P501	Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration
------	--

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
Not Available	100	organic vegetable mealy.

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▸ Wash out immediately with fresh running water. ▸ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▸ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▸ Immediately remove all contaminated clothing, including footwear. ▸ Flush skin and hair with running water (and soap if available). ▸ Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none"> ▸ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▸ Other measures are usually unnecessary.
	<ul style="list-style-type: none"> ▸ IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. ▸ For advice, contact a Poisons Information Centre or a doctor. ▸ Urgent hospital treatment is likely to be needed

Gold Eagle Alumaseal Radiator Sealer

- ▶ his/her care and a copy of the MSDS should be provided. Further action will be the responsibility of the medical specialist.
- ▶ If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the MSDS.

Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:

- ▶ **INDUCE** vomiting with fingers down the back of the throat, **ONLY IF CONSCIOUS**. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

NOTE: Wear a protective glove when inducing vomiting by mechanical means.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- ▶ There is no restriction on the type of extinguisher which may be used.
- ▶ Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility None known.

Advice for firefighters

Fire Fighting

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- ▶ Wear breathing apparatus plus protective gloves in the event of a fire.
- ▶ Prevent, by any means available, spillage from entering drains or water courses.
- ▶ Use fire fighting procedures suitable for surrounding area.

Fire/Explosion Hazard

- ▶ Non combustible.
- ▶ Not considered a significant fire risk, however containers may burn. May emit poisonous fumes.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills

- ▶ Remove all ignition sources.
- ▶ Clean up all spills immediately.
- ▶ Avoid contact with skin and eyes.
- ▶ Control personal contact with the substance, by using protective equipment.

Major Spills

- Moderate hazard.
- ▶ **CAUTION:** Advise personnel in area.
 - ▶ Alert Emergency Services and tell them location and nature of hazard.
 - ▶ Control personal contact by wearing protective clothing.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

- ▶ Avoid all personal contact, including inhalation.
- ▶ Wear protective clothing when risk of exposure occurs.
- ▶ Use in a well-ventilated area.
- ▶ Prevent concentration in hollows and sumps.

Other information

- ▶ Store in original containers.
- ▶ Keep containers securely sealed.
- ▶ Store in a cool, dry area protected from environmental extremes.

Gold Eagle Alumaseal Radiator Sealer

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ▸ Polyethylene or polypropylene container. ▸ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA


Not Available

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
Gold Eagle Alumaseal Radiator Sealer	Not Available	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
organic vegetable mealy.	Not Available	Not Available

Exposure controls

Appropriate engineering controls	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.</p>
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> ▸ Safety glasses with side shields. ▸ Chemical goggles. ▸ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin protection	See Hand protection below
Hands/feet protection	<p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p> <p>Suitability and durability of glove type is dependent on usage.</p>
Body protection	See Other protection below
Other protection	<ul style="list-style-type: none"> ▸ Overalls. ▸ P.V.C. apron. ▸ Barrier cream.
Thermal hazards	Not Available

Recommended material(s)

Respiratory protection

Gold Eagle Alumaseal Radiator Sealer

The effect(s) of the following substance(s) are taken into account in the **computer-generated** selection:

Gold Eagle Alumaseal Radiator Sealer Not Available

Material	CPI
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* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

up to 10 x ES	P1 Air-line*	- -	PAPR-P1 -
up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

* - Negative pressure demand ** - Continuous flow

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Tan coloured powder; partly soluble in water.		
Physical state	Divided Solid	Relative density (Water = 1)	1.0
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Applicable
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Applicable
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available
Solubility in water (g/L)	Partly Miscible	pH as a solution(1%)	Not Applicable
Vapour density (Air = 1)	Not Applicable	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	<ul style="list-style-type: none"> ▸ Unstable in the presence of incompatible materials. ▸ Product is considered stable. ▸ Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Gold Eagle Alumaseal Radiator Sealer

Inhaled	There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.
Ingestion	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	There is some evidence to suggest that this material can cause eye irritation and damage in some persons.
Chronic	Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung.

Gold Eagle Alumaseal Radiator Sealer	TOXICITY	IRRITATION
	Not Available	Not Available

Not available. Refer to individual constituents.

Acute Toxicity	✓	Carcinogenicity	⊘
Skin Irritation/Corrosion	✓	Reproductivity	⊘
Serious Eye Damage/Irritation	⊘	STOT - Single Exposure	⊘
Respiratory or Skin sensitisation	⊘	STOT - Repeated Exposure	⊘
Mutagenicity	⊘	Aspiration Hazard	⊘

Legend: ✓ – Data required to make classification available
 ✗ – Data available but does not fill the criteria for classification
 ⊘ – Data Not Available to make classification

CMR STATUS

Not Applicable

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Not Available	Not Available	Not Available

Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available

Mobility in soil

Ingredient	Mobility
Not Available	Not Available

SECTION 13 DISPOSAL CONSIDERATIONS

Gold Eagle Alumaseal Radiator Sealer

- Bury residue in an authorised landfill.
- Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

Not Applicable

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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ARCAL CHEMICALS, INC.

SAFETY DATA SHEET Weld-O

Revised July 8, 2015

1. IDENTIFICATION OF THE PRODUCT AND MANUFACTURER Weld-O

Arcal Chemicals, Inc.
223 Westhampton Avenue
Capitol Heights, MD 20743

Tele: 301-336-9300
Fax: 301-336-6597
Emergency: Chemtrec 800-424-9300

2. HAZARDS IDENTIFICATION



WARNING

Corrosive and toxic.

If contaminated clothing is allowed to remain in contact with skin for many minutes or hours, serious damage may be caused by calcium fluoride precipitation in blood vessel capillaries and gangrene may result.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

<u>Hazardous Component</u>	<u>CAS #</u>	<u>Conc.</u>	<u>OSHA PEL</u>	<u>ACGIH TWA</u>
Hydrofluoric Acid	7664-39-3	<5 %	3 ppm	3 ppm
Nitric Acid	7697-37-2	<1 %	2 ppm	2 ppm
Diacetone Alcohol	123-42-2	<5 %	50 ppm	50 ppm

4. FIRST AID MEASURES

Eye contact: Flush with clean clear water for 15 minutes or until irritation subsides. If irritation persists, seek medical advice.

Skin contact: Remove any contaminated clothing and flush with plenty of cool water. If 0.13% benzalkonium chloride solution or 2.5% calcium gluconate gel is available, the water rinse may be limited to 5 minutes, with soaks of gel applied as soon as the rinsing is stopped.

Inhalation: If overcome from inhalation, remove subject from exposure and seek medical attention.

Ingestion: Have the subject drink large amounts of water as quickly as possible to dilute the acid. Do not induce vomiting. Do not give emetics or baking soda.

5. FIRE-FIGHTING MEASURES

SAFETY DATA SHEET Weld-O

Revised July 8, 2015

NFPA FIRE HAZARDS: **HEALTH** **FLAMMABILITY** **REACTIVITY**
 4 (serious) **0** (insignificant) **2** (moderate)

Weld-O is over 80% water and unlikely to burn. (A small amount of surfactant will produce carbon oxides if burned.) If Weld-O is heated by nearby fire or heat, vapors of hydrofluoric acid will be produced and should be avoided. Granulated limestone (agricultural lime) may be used to neutralize acid runoff from containers which are punctured or overfilled with water spray.

6. ACCIDENTAL RELEASE MEASURES

In case Weld-O is spilled, treat the area with an alkaline material like agricultural lime, carefully scoop up the result and dispose in a plastic container with hazardous waste. Lime will precipitate the fluoride ion and neutralize acid. Sodium bicarbonate may also be used but produces a soluble fluoride which is toxic and is more difficult to dispose.

7. HANDLING AND STORAGE

Store Weld-O in a cool dry place where moisture will not collect on containers and where heat from equipment or the sun will not expose the product to temperature extremes.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Where ventilation is insufficient to insure low personal exposure, see Section 3 for Permissible Exposure Limit (PEL) and Time Weighted Average (TWA) and use appropriate monitoring equipment. Use of Weld-O in confined space requires breathing apparatus to prevent inhalation of any mist thrown off by the foam which develops during the cleaning process. Splash-proof safety goggles and chemically resistant gloves (without tears, pinholes or other signs of wear) are highly recommended to protect personnel. A waterproof apron protects against splashes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pink liquid, can foam if shaken
Odor: Acidic - caution; avoid breathing vapors
Density: 8.4 pounds per gallon
Boiling point: 212 F
Volatile Organic Content: (VOC): <50 g/L
Solubility in water: Completely soluble
Flash point: >160 F estimated; non-burnable
pH <1

10. STABILITY AND REACTIVITY

Weld-O is not subject to polymerization. Avoid inadvertent contact with metals, and with any

SAFETY DATA SHEET Weld-O

Revised July 8, 2015

oxidizable material which could generate foam. The major hazard is the corrosive action of hydrogen fluoride, so store Weld-O away from materials which could be affected by exposure to corrosive vapors.

11. TOXICOLOGICAL INFORMATION

The primary irritant effect is on the skin (including the eye), especially from prolonged contact. Other ingredients are diluted and present minimal hazard. The complete product has not been tested.

12. ECOLOGICAL INFORMATION

Do not allow liquid product to reach ground water, water course or sewer.

13. DISPOSAL CONSIDERATIONS

Waste product is hazardous (US EPA: due to fluoride and acidity). Do not dispose with residential garbage or allow product to reach ground water or sewer.

14. TRANSPORT INFORMATION

ID No.	Proper Shipping Name	Hazardous Class	Packing Group
UN 1790	Hydrofluoric Acid Solution <5%	8, (6.1)	II

15. REGULATORY INFORMATION

TSCA: All ingredients are listed.

16: OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.



Safety Data Sheet

The Armor All/STP Products Company
44 Old Ridgebury Road
Suite 300
Danbury, CT 06810
Tel. 1-203-205-2900

1. Product And Company Identification

Product Name: ARMOR ALL® Ultra Shine Wash & Wax

Responsible Party: The Armor All/STP Products Company
44 Old Ridgebury Road
Suite 300
Danbury, CT 06810

Information Phone Number: +1 203-205-2900

Emergency Phone Number:

For Medical Emergencies, call 1-866-949-6465 / +1 303-389-1332 (Outside US and Canada)
For Transportation Emergencies, call 1-800-424-9300 (Chemtrec) +1-703-527-3887 for
Outside US and Canada (call collect)

SDS Date of Preparation: 06/11/2015

Product Use and Uses Advised Against: Auto cleaning product – For consumer use

2. Hazards Identification

Note: This product is a consumer product and is labeled in accordance with the Consumer Product Safety Commission regulations and not OSHA regulations. The requirements for the labeling of consumer products take precedence over OSHA labeling so the actual product label will not contain the OSHA label elements shown below on this SDS.

GHS Classification:

Physical:	Health:
Non-Hazardous	Eye Irritation Category 2A

GHS Label Elements:



WARNING!

Statements of Hazard

Causes serious eye irritation.

Prevention

Wash thoroughly after handling.

Wear eye protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical attention.

Hazards not otherwise specified: None



Safety Data Sheet

The Armor All/STP Products Company
44 Old Ridgebury Road
Suite 300
Danbury, CT 06810
Tel. 1-203-205-2900

Percentage of unknown toxicity: N/A

3. Composition/Information On Ingredients

Component	CAS No.	Amount
Non-Hazardous Ingredients	Mixture	>94%
Benzenesulfonic acid, C10-16-alkyl derivs.	68584-22-5	1 – <3%
Sodium alpha-olefin sulfonate	68439-57-6	1 – <3%

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. First Aid Measures

Inhalation: If inhaled, remove to fresh air. If breathing is difficult have qualified personnel administer oxygen. Get medical attention.

Skin Contact: Rinse skin with plenty of water. If skin irritation develops, seek medical attention.

Eye Contact: If contact occurs, flush eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Get medical attention if irritation persists.

Ingestion: Do not induce vomiting unless directed to by a doctor or physician. If the victim is fully conscious, have them rinse their mouth with water. Get medical assistance by calling a doctor or poison center. Never give anything by mouth to a person who is unconscious or drowsy.

Most Important Symptoms: Eye contact causes eye irritation. May cause mild skin irritation. May cause mild respiratory irritation.

Indication of Immediate Medical Attention/Special Treatment: Immediate medical attention should not be required.

5. Firefighting Measures

Suitable (and Unsuitable) Extinguishing Media: Use any media that is suitable for the surrounding fire. Cool fire exposed containers with water.

Specific Hazards Arising From the Chemical: Closed containers may rupture if exposed to extreme heat. Burning may release oxides of sulfur and carbon.

Special Fire Fighting Procedures: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures: Wear appropriate protective clothing and equipment as described in Section 8.

Environmental Precautions: Report spill as required by local and national regulations. Prevent entry in storm sewers and waterways.



Safety Data Sheet

The Armor All/STP Products Company
44 Old Ridgebury Road
Suite 300
Danbury, CT 06810
Tel. 1-203-205-2900

Methods and Materials for Containment / Cleanup: Absorb with an inert material. Collect into a suitable container for disposal. Rinse area with water.

7. Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Avoid contact with skin and clothing. Avoid breathing vapors or mists. Use only with appropriate protective equipment. Launder contaminated clothing before re-use.

Empty containers retain product residue and may be hazardous. Do not cut, weld, drill, etc. containers, even empty. Do not reuse empty containers.

Conditions for Safe Storage, Including Any Incompatibilities:

Protect containers from physical damage. Store in a cool, well-ventilated area away from acids and other incompatible materials. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Exposure Guidelines:

CHEMICAL	EXPOSURE LIMIT
Non-Hazardous Ingredients	None Established
Benzenesulfonic acid, C10-16-alkyl derivs.	None Established
Sodium alpha-olefin sulfonate	None Established

Appropriate Engineering Controls: General ventilation should be adequate for all normal use.

Personal Protective Equipment

Respiratory Protection: Good general ventilation (equivalent to outdoors) should be adequate under normal conditions. For operations where exposures may be excessive use a NIOSH approved respirator (mask) with appropriate eye protection. A full face piece respirator provides both eye and respiratory protection. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134, and all other applicable regulations; and good Industrial Hygiene practice.

Gloves: None normally required. Impervious gloves such as rubber, neoprene or nitrile are recommended for prolonged or repeated contact.

Eye Protection: Safety glasses or goggles are recommended if eye contact is possible.

Other Protective Equipment/Clothing: None required with normal use.

9. Physical and Chemical Properties

Appearance And Odor: Clear, thick, orange liquid with a fruity, apple, melon scent.

Physical State: Clear liquid.	Odor Threshold: Not available
pH: ~7.5	Specific Gravity: Not determined
Initial Boiling Point/Range: Not determined	Vapor Pressure: Not determined



Safety Data Sheet

The Armor All/STP Products Company
44 Old Ridgebury Road
Suite 300
Danbury, CT 06810
Tel. 1-203-205-2900

Melting/Freezing Point: Not determined	Vapor Density: Not determined
Solubility In Water: Complete	Percent Volatile: >85%
Viscosity: ~ 500cP	Evaporation Rate: Not determined
Relative Density: ~ 1.0	VOC Content: Not available
Coefficient Of Water/Oil Distribution: Not determined	Autoignition Temp: Not determined
Flash Point: Not applicable	Flammability Limits: LEL: Not applicable UEL: Not applicable
Decomposition Temperature: Not available	Flammability (solid, gas): Not applicable

10. Stability and Reactivity

Reactivity: Not normally reactive

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: Will react with acids and strong oxidizing agents.

Conditions To Avoid: None known.

Incompatible Materials: Acids and strong oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition may release oxides of sulfur and carbon.

11. Toxicological Information

Acute Hazards:

Inhalation: May cause mild irritation to mucous membranes and upper respiratory tract.

Skin Contact: May causes mild skin irritation.

Eye Contact: Causes eye irritation.

Ingestion: Swallowing may cause gastrointestinal disturbances.

Chronic Effects: None currently known.

Carcinogenicity Listing: None of the components is listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH or OSHA.

Acute Toxicity Values:

Sodium alpha-olefin sulfonate: LD50 Oral Rat: 2,079 mg/kg
LD50 Skin Rabbit: > 6,300 mg/kg
LC50 Inhalation Rat: >5.2 mg/L/4 hr.

Benzenesulfonic acid, C10-16-alkyl derivs:
LD50 Oral Rat: 2,000 mg/kg
LD50 Skin Rabbit: > 2,000 mg/kg
LC50 Inhalation Rat: >1.9 mg/L/4 hr.



Safety Data Sheet

The Armor All/STP Products Company
44 Old Ridgebury Road
Suite 300
Danbury, CT 06810
Tel. 1-203-205-2900

12. Ecological Information

Ecotoxicity:

Sodium alpha-olefin sulfonate: LC50 Brach danio rerio 4.2 mg/L/96 hr
EC50 Daphnia magna (Water flea, neonate) 65 mg /L/24 hr.
EC50 Ceriodaphnia sp. 4.53 mg/L/48 hr.

Benzenesulfonic acid, C10-16-alkyl derivs:
LL50 Pimephales promelas >1,000 mg/L/ 96 hr.
EC50 : Daphnia magna >1,000 mg / L / 48 hr.

Persistence and Degradability:

Sodium alpha-olefin sulfonate: Readily biodegradable

Bio accumulative Potential:

Sodium alpha-olefin sulfonate: BCF 70.8

Mobility in Soil: No data available

Other Adverse Effects: No data available

13. Disposal Considerations

Dispose of in accordance with all local, state/provincial and federal regulations.

14. Transport Information

DOT Hazardous Materials Description: Not Regulated

Canadian TDG Hazardous Materials Description: Not Regulated

IMDG Dangerous Goods Description: Not Regulated

15. Regulatory Information

United States:

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA Section 103: This product has no RQ. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Acute Health

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

Canada:

Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian DSL or the NDSL.



Safety Data Sheet

The Armor All/STP Products Company
44 Old Ridgebury Road
Suite 300
Danbury, CT 06810
Tel. 1-203-205-2900

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

16. Other Information

NFPA Rating (NFPA 704):	Health: 1	Fire: 0	Instability: 0
HMIS Rating:	Health: 2	Fire: 0	Physical Hazard: 0

DATE OF CURRENT REVISION: 06/11/2015

REVISION SUMMARY: Update to OSHA HazCom 2012 GHS format. Changes to all sections.

DATE OF PREVIOUS REVISION: 08/30/2012

DATA SUPPLIED IS FOR USE ONLY IN CONNECTION WITH OCCUPATIONAL SAFETY AND HEALTH

SAFETY DATA SHEET – ATP AUTOMATIC TRANSMISSION FLUID SYNTHETIC FRICTION MODIFIER #AT-203

1. IDENTIFICATION

1.1. PRODUCT IDENTIFIER USED ON LABEL:

1.1.1. ATP AUTOMATIC TRANSMISSION FLUID SYNTHETIC FRICTION MODIFIER
#AT-203

1.2. OTHER MEANS OF IDENTIFICATION:

1.2.1. SYNTHETIC FRICTION MODIFIER

1.3. RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE;

1.3.1. PETROLEUM LUBRICATING OIL

1.3.2. FRICTION MODIFIER

1.3.3. NO OTHER USES RECOMMENDED

1.4. NAME, ADDRESS, AND TELEPHONE NUMBER OF THE CHEMICAL MANUFACTURER, IMPORTER, OR OTHER RESPONSIBLE PARTY:

1.4.1.

Life Automotive Products, Inc.

500 Industrial Park Drive
Selmer, TN 38375-3276
United States of America

Product Information

MSDS Requests: (800) 264-6457 or +17316454972
Technical Information: (800) 264-6457 or +17316454972
General Information: vswedley@spectrumcorporation.com

1.5. EMERGENCY PHONE NUMBER:

1.5.1.

Emergency Response

North America: CHEMTREC (800) 424-9300 after 5:00pm CST Or +17035273887

Health Emergency

USA: (800) 264-6457 or +17316454972

2. HAZARD(S) IDENTIFICATION

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2.1. CLASSIFICATION OF THE CHEMICAL IN ACCORDANCE WITH PARAGRAPH (d) of §1910.1200:

- 2.1.1. Acute Inhalation Category 4
- 2.1.2. Skin Irritant Category 2
- 2.1.3. Eye Irritant Category 2
- 2.1.4. Skin Sensitizer Category 1

2.2. Signal Word:

- 2.2.1. Warning

2.3. Symbol:



2.4. Hazard Statements:

- 2.4.1. Harmful if Inhaled
- 2.4.2. Causes skin irritation
- 2.4.3. Causes serious eye irritation
- 2.4.4. May cause an allergic skin reaction

2.5. Precautionary Statements:

2.5.1. Prevention:

- 2.5.1.1. Avoid breathing mist or spray.
- 2.5.1.2. Use only outdoors or in a well-ventilated area.
- 2.5.1.3. Wash thoroughly after handling.
- 2.5.1.4. Wear protective gloves.
- 2.5.1.5. Wear eye protection/face protection.
- 2.5.1.6. Contaminated work clothing should not be allowed out of the workplace.

2.5.2. Response:

- 2.5.2.1. If inhaled: Remove person to fresh air and keep comfortable for breathing.
- 2.5.2.2. If on skin: Wash with plenty of water.
- 2.5.2.3. If skin irritation occurs: Get Medical advice/attention.
- 2.5.2.4. Take off contaminated clothing and wash it before reuse.
- 2.5.2.5. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- 2.5.2.6. Immediately call a poison center/doctor.

2.5.3. Disposal:

- 2.5.3.1. Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/ information on ingredients

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3.1. The chemical name and concentration (exact percentage) or concentration ranges of all ingredients which are classified as health hazards in accordance with paragraph (d) of §1910.1200

3.1.1.

COMPONENTS	CAS Number	EU Number	Concentration (%)	Hazard Statements (see Section 16)
Polyalphaolefin	68037-01-4	500-183-1	25-50	H319
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	265-157-1	30-50	H332
Branched alkanes	68649-11-6	500-228-5	<10	H332
Amines, C12-14-alkyl, C6-10-alkyl phosphates	68603-55-4	271-663-3	10-20	H302, H315, H317, H319

4. FIRST AID MEASURES

4.1.

Skin:	Wash skin with soap and warm water. Wash clothing before re-use. If skin irritation or rash occurs: Get medical advice/attention.
Eye:	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.
Inhalation:	Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell
Ingestion:	If ingested, do not induce vomiting. Call a physician.

5. FIRE FIGHTING MEASURES

5.1. **Flash Point:** >257°F (>125°C)

5.2. **Protective Equipment/Fire Fighting Instructions:**

5.2.1. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

5.3. **Extinguishing Media:**

5.3.1. Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

5.4. **Special Firefighting Procedures:**

5.4.1. Cool exposed containers with water spray.

5.5. **Unusual Fire and Explosion Hazards:**

5.5.1. Pressure increase in over heated closed containers. Cool containers with water spray.

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6. ACCIDENTAL RELEASE MEASURES

6.1. Spill Procedures:

6.1.1. Remove ignition sources. Recover Liquid. Add absorbent to spill area. Ventilate confined spaces. Advise authorities if product enters sewers, etc.

6.2. Waste Disposal:

6.2.1. Assure conformity with applicable disposal regulations. Dispose of absorbed material at approved waste site

6.3. Precautionary Measures:

6.3.1. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling.

6.3.2. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

7. HANDLING AND STORAGE

7.1. Handling

7.1.1. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum re-conditioner or disposed of properly.

7.2. Storage

7.2.1. Keep container closed when not in use. Do not store with strong oxidizing agents. Do not store at elevated temperatures.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1. Component Exposure Limits:

8.1.1. AUTOMATIC TRANSMISSION FLUID 5mg/m³ (oil mist) ACGIH TLV OSHA PEL

COMPONENTS	ACGIH TLV	OSHA PEL
Polyalphaolefin	5mg/m ³ (oil mist) TWA	5mg/m ³ (oil mist) TWA
Petroleum distillates, hydrotreated heavy paraffinic	5mg/m ³ (oil mist) TWA	5mg/m ³ (oil mist) TWA
Branched alkanes		

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COMPONENTS	ACGIH TLV	OSHA PEL
Amines, C12-14-alkyl, C6-10-alkyl phosphates		

8.2. Engineering Controls:

8.2.1. Ventilate as needed to comply with exposure limit

8.3. Eye Protection:

8.3.1. Use goggles/face shield to avoid eye contact

8.4. Glove Protection:

8.4.1. Use impervious gloves to avoid repeated/prolonged skin contact.

8.5. Work/Hygienic Practices:

8.5.1. If clothing becomes contaminated, change to fresh clean clothing. Do not wear until thoroughly laundered.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Appearance/Odor:	Red colored liquid with mild hydrocarbon odor.	9.2. Odor Threshold:	No data available
9.3. pH:	No data available	9.4. Boiling Point:	Wide range
9.5. Melting Point:	No data available	9.6. Solubility (H ₂ O):	Negligible
9.7. Specific Gravity:	0.8607 @ 15.6°C	9.8. Density:	7.128 lbs/gal
9.9. Octanol/H ₂ O Coeff.:	No data available	9.10. Evaporation Rate (BUAC=1):	<1
9.11. Molecular Weight:	No data available	9.12. Decomposition Temp:	No data available
9.13. Auto Ignition:	No data available	9.14. Lower Flammability Limit:	No data available
9.15. Flash Point:	>257°F (>125°C)	9.16. Upper Flammability Limit:	No data available
9.17. Vapor Density (Air=1):	>1	9.18. Vapor Pressure:	<1mmHg @ 20°C
9.19. VOC:	Nil	9.20. Flammability Class:	Not classified
9.21. Viscosity @ 40°C	39.18cSt (39.18 mm ² /s)	9.22. Viscosity @ 100°C	7.6cSt (7.6 mm ² /s)

10. STABILITY AND REACTIVITY

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10.1. Reactivity:

10.1.1. Material does not pose a significant reactivity hazard.

10.2. Chemical Stability:

10.2.1. Stable

10.3. Incompatibility/Conditions to avoid:

10.3.1. Avoid strong oxidants

10.4. Possibility of Hazardous Reactions:

10.4.1. Will not undergo hazardous polymerization.

10.5. Hazardous Decomposition Products:

10.5.1. Partial burning produces fumes, smoke and carbon monoxide

11. TOXICOLOGY INFORMATION

11.1. Likely Routes of Exposure:

11.1.1. Ingestion, Inhalation, Eye contact, Skin contact.

11.2. Acute Effects:

11.2.1. Inhalation: Harmful if inhaled.

11.2.2. Eye Contact: Causes serious eye irritation.

11.2.3. Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

11.2.4. Ingestion: Expected to be low ingestion hazard.

11.3. Component Data/ Analysis

COMPONENTS	Oral (LD50) (Rat)	Inhalation (LC50) (Rat)	Dermal (LD50) (Rabbit)
Petroleum distillates, hydrotreated heavy paraffinic	>5000 mg/kg	2.18 mg/l (4hr)	>2000 mg/kg
Polyalphaolefin	>5000 mg/kg	2.18 mg/l (4hr)	>2000 mg/kg
Branched alkanes	No data available	No data available	No data available
Amines, C12-14-alkyl, C6-10-alkyl phosphates	No data available	No data available	No data available

11.4. Sensitization:

11.4.1. May cause skin sensitization.

11.5. Carcinogenicity:

11.5.1. None greater than 0.1%.

11.6. Mutagenicity:

11.6.1. None known.

11.7. Reproductive Toxicity:

11.7.1. None known.

11.8. Teratogenicity:

11.8.1. None known.

12. ECOLOGICAL INFORMATION

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12.1. Ecotoxicity

12.1.1. An environmental fate analysis is not available for this specific product. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

12.2. Environmental Fate

12.2.1. Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.

13. DISPOSAL CONSIDERATIONS

13.1. Waste Disposal:

13.1.1. Assure conformity with applicable disposal regulations. Dispose of absorbed material at approved waste site.

14. TRANSPORTATION INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

14.1. ROAD AND RAIL

14.1.1. DOT: NOT REGULATED

14.2. VESSEL

14.2.1. IMDG: NOT REGULATED

14.3. AIR

14.3.1. IATA: NOT REGULATED

15. REGULATORY INFORMATION

15.1. TSCA Inventory

15.1.1. This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

15.2. SARA 302/304 Emergency Planning and Notification

15.2.1. No components were identified.

15.3. SARA 311/312 Hazard Identification

15.3.1. Acute (Immediate) Health Hazard

15.4. SARA 313 Toxic Chemical Notification and Release Reporting

15.4.1. No components were identified.

15.5. CERCLA

15.5.1. No components were identified.

15.6. Clean Water Act (CWA)