

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Colorless.-Clear.
Odor	: Fruity.
Odor threshold	: Not available.
pH	: Not applicable.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: 51.667°C (125°F)
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.84799
Solubility	: Soluble in the following materials: hot water. Partially soluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
d-Limonene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	4400 mg/kg	-
Alcohols, C9-11, ethoxylated	LD50 Dermal	Rabbit	2 g/kg	-
	LD50 Oral	Rat	1378 mg/kg	-

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
d-Limonene	Skin - Mild irritant	Rabbit	-	24 hours 10 Percent	-
Amides, coco, N,N-bis (hydroxyethyl)	Eyes - Severe irritant	Rabbit	-	100 microliters	-
	Skin - Moderate irritant	Rabbit	-	300 microliters	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
d-Limonene	-	3	-
Amides, coco, N,N-bis (hydroxyethyl)	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
d-Limonene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Section 11. Toxicological information

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

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.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	1893.3 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
d-Limonene	Acute EC50 421 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute EC50 688 µg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
Alcohols, C9-11, ethoxylated	Acute EC50 5.36 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 2686 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 8500 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
d-Limonene	4.38	1022	high
Alcohols, C9-11, ethoxylated	-	237	low

Mobility in soil

Section 12. Ecological information









Soil/water partition coefficient (K_{oc}) : Not available.

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

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not available.	Not available.	Not available.	UN1993	UN1993	UN1993
UN proper shipping name	Not Regulated For Ground Transportation.	Not Regulated For Ground Transportation.	Not Regulated For Ground Transportation.	FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.
Transport hazard class(es)	3 	3 	3 	3  	3  	3 
Packing group	III	III	III	III	III	III
Environmental hazards	No.	No.	No.	Yes.	Yes.	No.
Additional information	This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous	-	-	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Special provisions 640 (E) Tunnel code (D/E)	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The environmentally hazardous substance mark may appear if required by other transportation regulations.

Section 14. Transport information

materials.					
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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.

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

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
d-Limonene	≥91	Yes.	No.	No.	Yes.	No.
Alcohols, C9-11, ethoxylated	≥3 - <5	No.	No.	No.	Yes.	No.
Amides, coco, N,N-bis (hydroxyethyl)	≥0.3 - <1	No.	No.	No.	Yes.	Yes.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

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

Section 15. Regulatory information

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Amides, coco, N,N-bis(hydroxyethyl) 2,2'-iminodiethanol	Yes. Yes.	No. No.	No. No.	No. No.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

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.
Europe	: Not determined.
Japan	: All components are listed or exempted.
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	: All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	1
Flammability		2
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



Section 16. Other information

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Carc. 2, H351	On basis of test data Calculation method Calculation method Calculation method Calculation method

History

Date of printing : 3/31/2015.
Date of issue/Date of revision : 3/31/2015.
Date of previous issue : No previous validation.
Version : 1

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References : Not available.

☑ Indicates information that has changed from previously issued version.

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.

Material Safety Data Sheet



Clario Foaming Antibacterial Skin Cleanser

1. Product and company identification

Product name : Clario Foaming Antibacterial Skin Cleanser
Supplier : Betco Corporation
1001 Brown Avenue
Toledo, Ohio 43607
(800) 333-2156
Manufacturer : Betco Corporation
1001 Brown Avenue
Toledo, Ohio 43607
Code : 757
MSDS # : 757
Validation date : 8/31/2012.
Print date : 8/31/2012.
In case of emergency : Chemtrec (800) 424-9300
Product type : Liquid.

2. Hazards identification

Emergency overview

Physical state : Liquid.

Color : Amber.

Odor : Pleasant.

Signal word : CAUTION!

Hazard statements : MAY CAUSE EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Precautionary measures : Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Routes of entry : Dermal contact. Eye contact. Ingestion.

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin : May cause skin irritation.

Eyes : Moderately irritating to eyes.

Potential chronic health effects

Chronic effects : Contains material that may cause target organ damage, based on animal data.

Carcinogenicity : No known significant effects or critical hazards.

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.

Target organs : Contains material which may cause damage to the following organs: kidneys, upper respiratory tract, skin, eyes.

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

Clariso Foaming Antibacterial Skin Cleanser

3. Composition/information on ingredients

name	CAS number	%
propane-1,2-diol	57-55-6	1 - 5
glycerol	56-81-5	1 - 5

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 and hence require reporting in this section.

4. First aid measures

Eye contact	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately. In case of contact with eyes, rinse immediately with plenty of water.
Skin contact	Wash skin surfaces thoroughly after contact. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
Inhalation	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Ingestion	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product	: In a fire or if heated, a pressure increase will occur and the container may burst.
Extinguishing media	
Suitable	: Use an extinguishing agent suitable for the surrounding fire.
Not suitable	: None known.
Special exposure hazards	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
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.

6. Accidental release measures

Personal precautions	: 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	: Avoid dispersal of spilled 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).

Methods for cleaning up

6. Accidental release measures

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Ingredient	Exposure limits
propane-1,2-diol	AIHA WEEL (United States, 5/2010). TWA: 10 mg/m ³ 8 hour(s).
glycerol	ACGIH TLV (United States, 2/2010). TWA: 10 mg/m ³ 8 hour(s). Form: Inhalable fraction OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m ³ 8 hour(s). Form: Respirable fraction TWA: 10 mg/m ³ 8 hour(s). Form: Total dust OSHA PEL (United States, 6/2010). TWA: 5 mg/m ³ 8 hour(s). Form: Respirable fraction TWA: 15 mg/m ³ 8 hour(s). Form: Total dust

- 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.
- Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- 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.

Personal protection

8. Exposure controls/personal protection

- Respiratory** : Use a properly fitted, air-purifying or air-fed 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.
- Hands** : 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.
- Eyes** : 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.
- Skin** : 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.
- 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.

9. Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: Not applicable. [Product does not sustain combustion.]
- Color** : Amber.
- Odor** : Pleasant.
- pH** : 9 to 10
- Relative density** : 1.02
- Dispersibility properties** : Easily dispersible in the following materials: cold water and hot water.
- Solubility** : Easily soluble in the following materials: cold water and hot water.

10. Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
glycerol	LD50 Oral	Rat	12600 mg/kg	-
propane-1,2-diol	LD50 Dermal	Rabbit	20800 mg/kg	-
	LD50 Oral	Rat	20 g/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
propane-1,2-diol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Child	-	96 hours 30 Percent continuous	-
	Skin - Mild irritant	Human	-	168 hours 500 milligrams	-
	Skin - Moderate irritant	Human	-	72 hours 104 milligrams Intermittent	-
	Skin - Mild irritant	Woman	-	96 hours 30 Percent	-

Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
glycerol	Acute LC50 54 ml/L Fresh water	Fish - Oncorhynchus mykiss - 0.9 g	96 hours
propane-1,2-diol	Acute EC50 >1000 mg/L Fresh water	Daphnia - Daphnia magna - <24 hours	48 hours
	Acute LC50 1020000 ug/L Fresh water	Crustaceans - Ceriodaphnia dubia - <=24 hours	48 hours
	Acute LC50 710000 ug/L Fresh water	Fish - Pimephales promelas - <=7 days	96 hours

Conclusion/Summary : Not available.

Persistence/degradability

Conclusion/Summary : Not available.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
Mexico Classification	Not regulated.	-	-	-		-
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

PG* : Packing group

15. Regulatory information

HCS Classification : Irritating material
Target organ effects

U.S. Federal regulations : **TSCA 8(a) IUR Exempt/Partial exemption:** Not determined
United States inventory (TSCA 8b): Not determined.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: propane-1,2-diol; glycerol

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
propane-1,2-diol: Immediate (acute) health hazard, Delayed (chronic) health hazard;
glycerol: Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: triclosan

Clean Water Act (CWA) 311: Sodium hydroxide; Formaldehyde

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

15. Regulatory information

Clean Air Act Section 602 : Not listed
Class I Substances

Clean Air Act Section 602 : Not listed
Class II Substances

DEA List I Chemicals : Not listed
(Precursor Chemicals)

DEA List II Chemicals : Not listed
(Essential Chemicals)

State regulations

Massachusetts : The following components are listed: GLYCERINE MIST

New York : None of the components are listed.

New Jersey : The following components are listed: GLYCERIN; 1,2,3-PROPANETRIOL; PROPYLENE GLYCOL; 1,2-PROPANEDIOL

Pennsylvania : The following components are listed: 1,2,3-PROPANETRIOL; 1,2-PROPANEDIOL

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Formaldehyde	Yes.	No.	Yes.	No.

Canada inventory : Not determined.

International regulations

International lists

Australia inventory (AICS): Not determined.

China inventory (IECSC): Not determined.

Japan inventory: Not determined.

Korea inventory: Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined.

Chemical Weapons : Not listed

Convention List Schedule I
Chemicals

Chemical Weapons : Not listed

Convention List Schedule
II Chemicals

Chemical Weapons : Not listed

Convention List Schedule
III Chemicals

16. Other information

Label requirements : MAY CAUSE EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Hazardous Material :
Information System (U.S.A.)

Health	*	1
Flammability		0
Physical hazards		0

16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

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Version : 0.01
Prepared by : Not available.

Indicates information that has changed from previously issued version.

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.

Sample

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: DBC Lime & Mineral Solvent
PRODUCT ID: 4100x
PRODUCT USE: Cleaning compound
EMERGENCY: CALL CHEMTREC 1-800-424-9300

MANUFACTURER: National Chemicals, Inc.
 PO Box 32, Winona, MN 55987
 800-533-0027 or 507-454-5640
 info@NationalChemicals.com

SECTION 2 HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health	Environmental	Physical
Acute Toxicity, oral: Category 4 Skin Corrosion/Irritation: Category 1C Eye Irritation: Category 1		

Hazard Symbols:

Acute Toxicity, oral
Skin Corrosion
Eye Irritation



Signal Word:
DANGER

Hazard Statements	Precautionary Statements
H302: Harmful if swallowed H314: Causes severe skin burns and eye damage	P102: Keep out of reach of children P260: Do not breathe mist, vapors or spray P264: Wash thoroughly after handling P270: Do not eat, drink, or smoke when using this product P280: Wear gloves and eye protection

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration % by Weight
Sulfamic Acid	5329-14-6	10-20%
Glycolic Acid	79-14-1	≤ 10%
Phosphoric Acid	7664-38-2	≤ 10%

Other ingredients are judged to be non-hazardous, their CAS numbers and exact percent of composition are proprietary to National Chemicals, Inc.

SECTION 4 FIRST AID MEASURES

If in Eyes: Immediately call Poison Center or doctor. Rinse cautiously with for several minutes. Remove contact lenses, if present. Continue rinsing.

If on Skin (or hair): Immediately call Poison Center or doctor. Immediately take off contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.

If Inhaled: Call Poison Center or doctor. Remove person to fresh air and keep comfortable for breathing.

If Swallowed: Immediately call Poison Control or doctor. Rinse mouth. Do NOT induce vomiting.

SECTION 5 FIREFIGHTING MEASURES

Flammable Properties: Not Flammable

Suitable Extinguishing Media: Flood with water for extinguishing agent.

Hazardous Combustion Products: Unknown

Protection for Firefighters: Wear self-contained breathing apparatus and full protective gear, as with any fire.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ventilate area. Use personal protective equipment. Contain spill with dikes, sandbags, etc.

Environmental Precautions: Do not flush to sewer. This material is acidic and may lower the pH of the surface waters.

Methods For Cleaning Up: Neutralize with alkaline material (soda ash, lime or dilute caustic soda) then absorb with an inert material (vermiculite, dry sand, earth). Flush remaining material with plenty of water.

Avoid inhaling
Small amount
Sweep up

SECTION 7 HANDLING AND STORAGE

Handling: Avoid breathing vapor or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. When mixing, slowly add chemical to water. Never add water to chemical.

Storage: Keep container tightly closed and properly labeled. Store in a cool, dry place. Do not freeze. Do not store in aluminum container or use aluminum fittings or transfer lines. Keep separate from alkalis.

SECTION 8 PRECAUTIONS TO CONTROL EXPOSURE/PERSONAL PROTECTION

- Eye Protection:** Wear safety glasses with side shields.
Skin Protection: Use neoprene gloves. Always place pant legs over boots. Thoroughly clean and dry contaminated clothing before reuse.
Respiratory: Provide local exhaust ventilation where vapor or mist may be generated.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance:** Clear Liquid
Odor: Odorless
Water Solubility: Soluble
pH: Acidic in Solution
Boiling Point: Greater than 212°F (100 °C)
Freezing Point: Less than 32 °F (0 °C)

SECTION 10 STABILITY AND REACTIVITY

- Stability:** Stable at normal temperatures and pressure.
Decomposition: Thermal decomposition products or combustion: hydrogen gas or phosphorus oxides.
Incompatible Materials: Soft metals (i.e. aluminum, zinc) and strong alkalis (i.e. sodium hydroxide, mercuric sulfate, perchloric acid).

SECTION 11 TOXICOLOGICAL INFORMATION

- Likely Routes Of Exposure:** Eye and skin contact.
Acute Systems And Effects: The severity of the tissue damage is a function of concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur
Eye Contact: Exposure may cause severe burns and permanent damage to eyes.
Skin Contact: Exposure may cause severe burns and permanent tissue damage.
Inhalation: May cause irritation. Extreme exposures may cause burns to respiratory tract, nose, mouth, and throat.
Ingestion: Ingestion may cause internal burns and tissue damage.
Chronic Effects: None known

SECTION 12 ECOLOGICAL INFORMATION

- Biodegradation:** Not known.
Eco-toxicity: In large quantities, this material may be harmful to aquatic life.

SECTION 13 WASTE DISPOSAL CONSIDERATIONS

Flush spill with plenty of water before disposal. Dispose in accordance with all applicable regulations.

SECTION 14 TRANSPORT INFORMATION (For 1 gallon containers and greater)*

- Hazard Class:** Not classified as hazardous according to Department of Transportation

SECTION 15 REGULATORY INFORMATION

- TSCA Inventory Status:** All components of this product are on the TSCA Inventory or are exempt for TSCA Inventory requirements.
SARA TITLE III,
SECTIONS 311/312: ACUTE: Yes CHRONIC: No FIRE: No REACTIVE: No SUDDEN RELEASE: No
SARA TITLE 313: Not regulated

SECTION 16 OTHER INFORMATION

- Training Necessary:** Yes, training in practices and procedures contained in product literature or on product label
Issue Date: April 28, 2015
Supersedes: June 29, 2010

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

MATERIAL SAFETY DATA SHEET
(Prepared According to 29 CFR 1910.1200)

SECTION 1 - PRODUCT IDENTIFICATION					
Distributor	Wayne Concept Manufacturing Co., Inc.		Emergency Phone	Infotrac 1-800-535-5053	
Address	5005 Speedway Drive, Fort Wayne, IN 46825				
Trade Name	D-Mineralizer Concentrate		Product Type	Organic Salt - Acid Replacement	
SECTION 2 - INGREDIENTS					
CHEMICAL NAME/COMMON NAME		CAS NO.	PERCENT(Optional)	TVL (Source)	
Water		7732-18-5	To 100		
Organic Salt		506-89-8	20-40		
SARA HAZARD: TITLE III, SECTION 313:					
SECTION 3 - PHYSICAL DATA					
Boiling Point(°F)	216°F	Specific Gravity (H ₂ O = 1.0)	1.092 ±0.005	pH	1.5-2 ±0.5
Vapor Pressure (mmHg)	Not determined		Vapor Density (Air = 1)	Not determined	
Solubility in Water	<input checked="" type="checkbox"/> Complete	<input type="checkbox"/> Insoluble	<input type="checkbox"/> Emulsifiable (or Dispersable)	<input type="checkbox"/> Slight (or Partial)	
Evaporation Rate (vs H ₂ O)	<input type="checkbox"/> Faster	<input type="checkbox"/> Slower	<input checked="" type="checkbox"/> About the same	Appearance and Odor	Clear liquid with bland fragrance.
SECTION 4 - FIRE AND EXPLOSION HAZARD DATA					
Flash Point (T.C.C.)	°F	<input checked="" type="checkbox"/> None to Boiling	Flammable Limits	N.A. <input type="checkbox"/> Upper	N.A. <input type="checkbox"/> Lower
Extinguishing Media	Select for surrounding material.				
Special Firefighting Procedures	Use self contained breathing apparatus when entering fire area.				
Unusual Fire and Explosion Hazards	None				
SECTION 5 - REACTIVITY DATA					
Stability	Stable	Incompatibility	Carbonates, alkalis or powdered metals, chlorine, bromide, metal sulfides, nitrates, nitrites and potassium chlorate.		
Hazardous Decomposition Products	Carbon or nitrogen oxides, ammonia, hydrogen gas				
SECTION 6 - HEALTH HAZARD DATA					
Primary Routes of Exposure	<input checked="" type="checkbox"/> Eyes	<input checked="" type="checkbox"/> Skin	<input checked="" type="checkbox"/> Oral	<input checked="" type="checkbox"/> Inhalation	<input type="checkbox"/> Other
Signs and Symptoms of Overexposure (Acute)	Eyes: Severe eye irritant. Liquid and mists may cause irritation and injury to eyes. Skin: Skin irritant. May cause redness, irritation and dryness. Inhalation: Irritating to mucous membranes of nose, throat and lungs. Ingestion: Irritating to mouth, throat and gastrointestinal system.				
Signs and Symptoms of Overexposure (Chronic)	Skin: Long term exposure may cause dermatitis.				
Medical Conditions Aggravated by Overexposure	Existing dermatitis				
Carcinogen or Suspect Carcinogen Ingredients	<input type="checkbox"/> NTP	<input type="checkbox"/> IARC	<input type="checkbox"/> OSHA	<input checked="" type="checkbox"/> NONE	
SECTION 7 - EMERGENCY AND FIRST AID PROCEDURES					
Eyes	Flush with water for 15 minutes. Call a physician.				
Skin	Remove and rewash contaminated clothing before re-use. Wash skin with mild soap and water.				
Ingestion	Do not induce vomiting. Drink 3 or 4 glasses of water. Seek immediate medical attention.				
Inhalation	Remove to fresh air. If symptoms persists, see a physician.				
SECTION 8 - SPECIAL PROTECTION INFORMATION					
Respiratory Protection	Use with adequate ventilation.				
Ventilation Requirements	<input checked="" type="checkbox"/> Local Exhaust	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Other	Eye Protection	Safety glasses with splash shields
Protection Gloves	Acid resistant (rubber or nitrile)		Other Protection Clothing	As required to limit exposure.	
SECTION 9 - SPILL OR LEAK PROCEDURES					
Steps to be Taken If Released or Spilled	Mop up or otherwise absorb and hold for disposal.				
Waste Disposal Methods	Any method in accordance with local, state and Federal regulations.				
SECTION 10 - STORAGE AND HANDLING INFORMATION					
Precautions to be Taken In Handling and Storage	Keep container closed during storage. KEEP OUT OF REACH OF CHILDREN. For industrial and institutional use only.				

The health hazards given on this Material Safety Data Sheet apply to this product in the concentrated form (as supplied) and may differ significantly at use dilution. The signs and symptoms of overexposure apply only to negligence in handling or misuse of the concentrated product and not to the routine exposure of the diluted product under conditions of ordinary use.

HMIS
HAZARD
RATING

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	B

0 - Least
1 - Slight
2 - Moderate
3 - High
4 - Extreme

Date Prepared: January 28, 2014

SAFETY DATA SHEET

Issuing Date No data available

Revision Date 28-Apr-2015

Revision Number 2



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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Dynamo Liquid 5 Gallon Detergent

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Laundry, Detergent

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Phoenix Brands LLC

Supplier Address 2855 North Franklin Road, #7
Indianapolis
Indiana
46219
US

Supplier Phone Number Phone: 1-651-632-8955
Contact Phone 00-1-317-357-5715

Supplier Email mhueber@phoenixbrands.com

Emergency telephone number

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Label elements, including precautionary statements

Emergency Overview



The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Light blue

Physical State Viscous liquid Liquid

Odor Pleasant

Precautionary Statements - Prevention

Obtain special instructions before use

Precautionary Statements - Response

None

Precautionary Statements - Storage

None

Precautionary Statements - Disposal

None

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

2.02935% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Causes mild skin irritation
May cause slight eye irritation

Interactions with Other Chemicals

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Sodium laureth sulfate	9004-82-4	1 - 5	*
Sodium carbonate	497-19-8	1 - 5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures

Eye Contact

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

Skin Contact

Wash with soap and water.

Inhalation

Remove to fresh air.

Ingestion

Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention if



symptoms occur.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

No information available.

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge No.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with eyes.

Environmental Precautions

Environmental Precautions Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.



Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	No data available	None known
Water Solubility	Soluble in water	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	None known
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation	Specific test data for the substance or mixture is not available.
Eye Contact	Specific test data for the substance or mixture is not available.
Skin Contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
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