

## Section 4. First aid measures

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

### Indication of immediate medical attention and special treatment needed, if necessary

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

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : No specific fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides
- Special protective actions for fire-fighters** : 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.
- 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.

## Section 6. Accidental release measures

### 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 spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 the information in "For non-emergency personnel".
- 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 and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

## Section 6. Accidental release measures

- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. 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.
- 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.
- 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name   | Exposure limits  |
|---|--|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | <b>ACGIH TLV (United States, 4/2014).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction<br><b>NIOSH REL (United States, 10/2013).</b><br>TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist<br>STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours. |

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

### 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, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

## Section 8. Exposure controls/personal protection

### 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- 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.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Solid. [grease]
- Color** : Red.
- Odor** : Mild. Petroleum oil
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 0.9 g/cm<sup>3</sup>
- Solubility** : Insoluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): >0.205 cm<sup>2</sup>/s (>20.5 cSt)

## 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** : 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.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                                   | Result      | Species | Dose        | Exposure |
|---|-------------|---------|-------------|----------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | LD50 Dermal | Rabbit  | >5000 mg/kg | -        |
|   | LD50 Oral   | Rat     | >5000 mg/kg | -        |

**Conclusion/Summary** : No known significant effects or critical hazards.

#### Irritation/Corrosion

| Product/ingredient name        | Result               | Species | Score | Exposure       | Observation |
|--------------------------------|----------------------|---------|-------|----------------|-------------|
| tris(2-ethylhexyl) orthoborate | Eyes - Mild irritant | Rabbit  | -     | 100 milligrams | -           |

#### Conclusion/Summary

- Skin** : No known significant effects or critical hazards.  
**Eyes** : Causes eye irritation.  
**Respiratory** : No known significant effects or critical hazards.

#### Sensitization

##### Conclusion/Summary

- Skin** : No specific information is available in our database regarding the skin sensitizing properties of this product. Sensitization not suspected for humans.  
**Respiratory** : Sensitization not suspected for humans.

#### Mutagenicity

##### Conclusion/Summary

- Conclusion/Summary** : There are no data available on the mixture itself. Mutagenicity not suspected for humans.

#### Carcinogenicity

##### Conclusion/Summary

- Conclusion/Summary** : There are no data available on the mixture itself. Carcinogenicity not suspected for humans.

#### Reproductive toxicity

##### Conclusion/Summary

- Conclusion/Summary** : There are no data available on the mixture itself. Not considered to be dangerous to humans, according to our database.

#### Teratogenicity

##### Conclusion/Summary

- Conclusion/Summary** : There are no data available on the mixture itself. Teratogenicity not suspected for humans.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

## Section 11. Toxicological information

Not available.

### Aspiration hazard

| Name  | Result                         |
|---|--------------------------------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | ASPIRATION HAZARD - Category 1 |

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

### Potential acute health effects

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

### 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

Conclusion/Summary : No known significant effects or critical hazards.  
 General : No known significant effects or critical hazards.  
 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.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Conclusion/Summary : There are no data available on the mixture itself.

### Persistence and degradability

Conclusion/Summary : This product has not been tested for biodegradation. Not expected to be rapidly degradable. This product is not expected to bioaccumulate through food chains in the environment.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| MC 2495XRT              | -                 | -          | Not readily      |

### Bioaccumulative potential

Not available.

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : 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. 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 regulated.     | Not regulated.     | Not regulated.        | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name    | -                  | -                  | -                     | -              | -              | -              |
| Transport hazard class(es) | -                  | -                  | -                     | -              | -              | -              |
| Packing group              | -                  | -                  | -                     | -              | -              | -              |
| Environmental hazards      | No.                | No.                | No.                   | No.            | No.            | No.            |
| Additional information     | -                  | -                  | -                     | -              | -              | -              |

## Section 14. Transport information

**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) PAIR:** Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 307:** Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts; tris(dipentylidithiocarbamate-S,S')antimony

**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** : Immediate (acute) health hazard

#### Composition/information on ingredients

| Name  | %   | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|---|-----|-------------|----------------------------|----------|---------------------------------|---------------------------------|
| tris(2-ethylhexyl) orthoborate                                | 1-5 | No.         | No.                        | No.      | Yes.                            | No.                             |
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts | 1-5 | No.         | No.                        | No.      | Yes.                            | No.                             |

### SARA 313

|  | Product name  | CAS number | %   |
|--|---|------------|-----|
| <b>Form R - Reporting requirements</b> | Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts | 68649-42-3 | 1-5 |
| <b>Supplier notification</b>           | Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts | 68649-42-3 | 1-5 |

## Section 15. Regulatory information

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

|  |   |
|--|---|
| Connecticut Carcinogen Reporting                     | : None of the components are listed.                  |
| Connecticut Hazardous Material Survey                | : None of the components are listed.                  |
| Florida substances                                   | : None of the components are listed.                  |
| Illinois Chemical Safety Act                         | : None of the components are listed.                  |
| Illinois Toxic Substances Disclosure to Employee Act | : None of the components are listed.                  |
| Louisiana Reporting                                  | : None of the components are listed.                  |
| Louisiana Spill                                      | : None of the components are listed.                  |
| Massachusetts Spill                                  | : None of the components are listed.                  |
| Massachusetts Substances                             | : None of the components are listed.                  |
| Michigan Critical Material                           | : None of the components are listed.                  |
| Minnesota Hazardous Substances                       | : None of the components are listed.                  |
| New Jersey Spill                                     | : None of the components are listed.                  |
| New Jersey Toxic Catastrophe Prevention Act          | : None of the components are listed.                  |
| New Jersey Hazardous Substances                      | : The following components are listed: ZINC COMPOUNDS |
| New York Acutely Hazardous Substances                | : None of the components are listed.                  |
| New York Toxic Chemical Release Reporting            | : None of the components are listed.                  |
| Pennsylvania RTK Hazardous Substances                | : The following components are listed: ZINC COMPOUNDS |
| Rhode Island Hazardous Substances                    | : None of the components are listed.                  |

### California Prop. 65

None of the components are listed.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

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

Not listed.

### International lists

#### National inventory

|                   |  |
|-------------------|--|
| Australia         | : Not determined.                        |
| China             | : Not determined.                        |
| Europe            | : All components are listed or exempted. |
| Japan             | : Not determined.                        |
| Malaysia          | : Not determined.                        |
| New Zealand       | : Not determined.                        |
| Philippines       | : All components are listed or exempted. |
| Republic of Korea | : All components are listed or exempted. |
| Taiwan            | : Not determined.                        |

### Canada

WHMIS (Canada) : Not controlled under WHMIS (Canada).

#### Canadian lists

Canadian NPRI : The following components are listed: Zinc (and its compounds)



## Section 15. Regulatory information

CEPA Toxic substances : None of the components are listed.  
 Canada inventory; DSL/ NDSL : All components are listed or exempted.

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

## Section 16. Other information

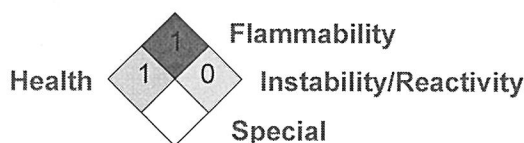
### Hazardous Material Information System (U.S.A.)

|                  |   |   |
|------------------|---|---|
| Health           | * | 1 |
| Flammability     |   | 1 |
| 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.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

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.

### History

Date of issue/Date of revision : 9/15/2015  
 Date of previous issue : 4/27/2015  
 Version : 2.02

Regulatory Department, Chemtool Inc.

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

## Section 16. Other information

### 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.

Effective Date: 1/21/00

Revision Date: 5/15/00

**PRODUCT IDENTITY: TRAVELER® WINTER ANTIFREEZE AND SUMMER COOLANT**

**1. SUPPLIER**

**OLD WORLD INDUSTRIES, INC.  
4065 COMMERCIAL AVENUE  
NORTHBROOK, ILLINOIS 60062  
PHONE: 847-559-2000  
EMERGENCY PHONE: 1-800-424-9300 (CHEMTREC)**

**2. INGREDIENTS**

| <b>MATERIAL</b>        | <b>CAS#</b> | <b>% BY WT</b> | <b>PEL (OSHA)</b> | <b>TLV (ACGIH)</b> |
|------------------------|-------------|----------------|-------------------|--------------------|
| Ethylene Glycol        | 107-21-1    | 90 - 95        | 50 ppm            | 50 ppm             |
| Diethylene Glycol      | 111-46-6    | 0 - 5          | None              | None               |
| Di Potassium Phosphate | 7758-11-4   | 1 - 2          | None              | None               |

**3. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

|                     |                                   |   |
|---------------------|-----------------------------------|---|
| <i>Slight odor.</i> | <i>May be fatal if swallowed.</i> | <i>Vapors can cause eye irritation.</i> |
|---------------------|-----------------------------------|---|

|                          |          |                      |
|--------------------------|----------|----------------------|
| LOWEST KNOWN LD50 (ORAL) | 107-21-1 | 5840 mg/kg (Rats)    |
| LOWEST KNOWN LD50 (SKIN) | 107-21-1 | 9530 mg/kg (Rabbits) |

**HAZARD RATING SYSTEM**

**NFPA: HEALTH: 1      FLAMMABILITY: 1      REACTIVITY: 0**  
**HMIS: HEALTH: 2      FLAMMABILITY: 1      REACTIVITY: 0**

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

## **POTENTIAL HEALTH EFFECTS**

### **Routes of Exposure: Inhalation, Ingestion, Skin Contact/Absorption, Eye Contact**

**EYE:** May cause slight transient (temporary) eye irritation. Corneal injury is unlikely. Vapors or mists may cause eye irritation.

**SKIN:** Prolonged or repeated exposure not likely to cause significant skin irritation. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Repeated skin exposure may result in absorption of harmful amounts. Massive contact with damaged skin or of material sufficiently hot to burn skin may result in absorption of potential lethal amounts.

**INGESTION:** Single dose oral toxicity is considered to be moderate. Excessive exposure may cause central nervous system effects, cardiopulmonary effects (metabolic acidosis), and kidney failure. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing amounts larger than that may cause serious injury, even death.

**INHALATION:** At room temperature, exposures to vapors are minimal due to physical properties; higher temperatures may generate vapor levels sufficient to cause adverse effects.

**SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:** Repeated excessive exposures may cause severe kidney and also liver and gastrointestinal effects. Signs and symptoms of excessive exposure may be central nervous system effects. Signs and symptoms of excessive exposure may be nausea and/or vomiting. Signs and symptoms of excessive exposure may be anesthetic or narcotic effects. Observations in animals include formation of bladder stones after repeated oral doses of ethylene glycol. Reports of kidney failure and death in burn patients suggest the ethylene glycol may have been a factor. The use of topical applications containing this material may not be appropriate in severely burned patients or individuals with impaired renal function.

**CANCER INFORMATION:** Based on data from long-term animal studies, ethylene glycol is not believed to pose a carcinogenic risk to man.

**TERATOLOGY (BIRTH DEFECTS):** Exposure to ethylene glycol has caused birth defects in laboratory animals only at doses toxic to the mother.

**REPRODUCTIVE EFFECTS:** Ethylene glycol has not interfered with reproduction in animal studies except at very high doses.

## **4. FIRST AID MEASURES**

***Ensure physician has access to this MSDS.***

**Eyes:** Immediately flush eyes with large amounts of water for 15 minutes, lifting lower and upper lids. Get medical attention as soon as possible. Contact lenses should never be worn when working with this chemical.

**Skin:** Flush area of skin contact immediately with large amounts of water for at least 15 minutes while removing contaminated clothing. If irritation persists after flushing, get medical attention promptly. Wash clothing before re-use.

**Inhalation:** If inhaled, immediately remove victim to fresh air and call ***emergency medical care***. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Ingestion:** Obtain medical attention immediately. If patient is fully conscious, give two glasses of water. Do not induce vomiting. If medical advice is delayed, and if the person has swallowed a moderate volume of material (a few ounces), then give three to four ounces of hard liquor, such as whisky. For children, give proportionally less liquor, according to weight.

**Notes to Physician:**

It is estimated that the lethal oral dose to adults is of the order of 1.0 ml/kg. Ethylene glycol is metabolized by alcohol dehydrogenase to various metabolites including glyceraldehydes, glycolic acid and oxalic acid which cause an elevated anion-gap metabolic acidosis and renal tubular injury. The signs and symptoms in ethylene glycol poisoning are those of metabolic acidosis, CNS depression, and kidney injury. Urinalysis may show albuminuria, hematuria and oxaluria. Clinical chemistry may reveal anion-gap metabolic acidosis and uremia. The currently recommended medical management of ethylene glycol poisoning includes elimination of ethylene glycol and metabolites, correction of metabolic acidosis and prevention of kidney injury. It is essential to have immediate and follow up urinalysis and clinical chemistry. There should be particular emphasis on acid-base balance and renal function tests. A continuous infusion of 5% sodium bicarbonate with frequent monitoring of electrolytes and fluid balance is used to achieve correction of metabolic acidosis and forced diuresis. As a competitive substrate for alcohol dehydrogenase, ethanol is antidotal. Given in the early stages of intoxication, it blocks the formulation of nephrotoxic metabolites. A therapeutically effective blood concentration of ethanol is in the range 100-150 mg/dl, and should be achieved by a rapid loading dose and maintained by intravenous infusion. For severe and/or deteriorating cases, hemodialysis may be required. Dialysis should be considered for patients who are symptomatic, have severe metabolic acidosis, a blood ethylene glycol concentration greater than 25 md/dl, or compromise of renal functions.

A more effective intravenous antidote for physician use is 4-methylpyrazole, a potent inhibitor of alcohol dehydrogenases, which effectively blocks the formation of toxic metabolites of ethylene glycol. It has been used to decrease the metabolic consequences of ethylene glycol poisoning before metabolic acidosis coma, seizures, and renal failure have occurred. A generally recommended protocol is a loading dose of 15 mg/kg followed by 10 mg/kg every 12 hours for 4 doses and then 15 mg/kg every 12 hours until ethylene glycol concentrations are below 20 mg/100 ml. Slow intravenous infusion is required. Since 4-methylpyrazole is dialyzable, increased dosage may be necessary during hemodialysis. Additional therapeutic measures may include the administration of cofactors involved in the metabolism of ethylene glycol. Thiamine (100 mg) and pyridoxine (50 mg) should be given every six hours.

Pulmonary edema with hypoxemia has been described in a number of patients following poisoning with ethylene glycol. The mechanism of production has not been elucidated, but it appears to be non-cardiogenic in origin in several cases. Respiratory support with mechanical ventilation and positive end expiratory pressure may be required. There may be cranial nerve involvement in the late stages of toxicity from swallowed ethylene glycol. In particular, effects have been reported involving the seventh, eighth and ninth cranial nerves, presenting with bilateral facial paralysis, diminished hearing and dysphasia.

## 5. FIRE FIGHTING MEASURES

**FLAMMABLE PROPERTIES**

FLASH POINT: 119°C (247°F)

METHOD USED: Setaflash

AUTOIGNITION TEMPERATURE: Autoignition temperature for ethylene glycol is 398°C (748°F).

**FLAMMABILITY LIMITS** - % of vapor concentration at which product can ignite in presence of spark.

Lower Flammability Limit: 3.2%

Upper Flammability Limit: 22%

**HAZARDOUS COMBUSTION PRODUCTS:** Hazardous combustion products may include and are not limited to carbon monoxide, carbon dioxide and trace amounts of aldehydes and organic acids. When available oxygen is limited, as in a fire or when heated to very high temperatures by a hot wire or plate, carbon monoxide and other hazardous compounds such as aldehydes might be generated.

**EXTINGUISHING MEDIA:** Water fog or fine spray. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively. Carbon dioxide. Dry chemical. Do not use direct water stream. May spread fire.

**FIRE FIGHTING INSTRUCTIONS:** No fire and explosion hazards expected under normal storage and handling conditions (i.e. ambient temperatures). However, ethylene glycol or solutions of ethylene glycol and water can form flammable vapors with air if heated sufficiently. Keep people away. Isolate fire area and deny unnecessary entry.

**PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:** Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire-fighting helmet, coat, pants, boots and gloves).

## 6. ACCIDENTAL RELEASE MEASURES

**PROTECT PEOPLE:** Material is moderately toxic when ingested. Take adequate precautions to keep people, especially children away from spill site. PVC-coated rubber gloves and monogoggles or faceshield can be used during cleanup of spill site.

**PROTECT THE ENVIRONMENT:** Do not dump used product or diluted material into sewers, on the ground, or into any body of water.

**CLEANUP:** Small spills: Soak up with absorbent material. Large spills: Dike and pump into suitable containers for disposal. Ensure compliance with all applicable statues that require notification of appropriate government officials.

## 7. HANDLING AND STORAGE

Product on surfaces can cause slippery conditions. Practice reasonable care and cleanliness. Avoid breathing spray mists if generated. Keep out of reach of children. Product may become a solid at temperatures below -18°C (0°F). Do not store near food, foodstuffs, drugs or potable water supplies.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Respiratory Protection:

Respiratory protection is required if airborne concentration exceeds TLV. At any detectable concentration, any self-contained breathing apparatus with a full facepiece and operated in a pressure-demand or other positive pressure mode or any supplied-air respirator with a full facepiece and operated in a pressure-demand or other positive pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive pressure mode.

**Escape:** Any air-purifying full facepiece respirator (gas mask) with a chin-style or front- or back-mounted organic vapor canister or any appropriate escape-type self-contained breathing apparatus.

**Skin Protection:** Protective gloves recommended when prolonged skin contact cannot be avoided. Polyethylene; Neoprene; Nitrile; Polyvinyl alcohol; Natural Rubber, Butyl Rubber. Safety shower should be available.

**Eye Protection:** Safety goggles and face shield. Emergency eyewash should be available. Contact lenses should not be worn when working with this chemical.

**Engineering Controls:** Use general or local exhaust ventilation to meet TLV requirements.

## EXPOSURE LIMITS

| <u>Component</u>  | <u>Exposure Limits</u>   | <u>Skin Form</u>  |
|-------------------|--|-------------------|
| Ethylene glycol   | 100 mg/m <sup>3</sup> CEILING ACGIH  | Aerosol           |
| Ethylene glycol   | 125 mg/m <sup>3</sup> CEILING OSHA-vacated<br>50 ppm CEILING OSHA - vacated<br>100 mg/m <sup>3</sup> CEILING UCC | Aerosol and Vapor |
| Diethylene glycol | 50 ppm TWA8 AIHA WEEL  | Aerosol and Vapor |
| Diethylene glycol | 10 mg/m <sup>3</sup> TWA8 AIHA WEEL  | Aerosol           |

In the Exposure Limits Chart above, if there is no specific qualifier (i.e., Aerosol) listed in the Form Column for a particular limit, the listed limit includes all airborne forms of the substance that can be inhaled.

A "Yes" in the Skin Column indicates a potential significant contribution to overall exposure by the cutaneous (skin) route, including mucous membranes and the eyes, either by contact with vapors or by direct skin contact with the substance. A "Blank" in the Skin column indicates that exposure by the cutaneous (skin) route is not a potential significant contributor to overall exposure.

## 9. PHYSICAL PROPERTIES

|                                  |                           |
|----------------------------------|---------------------------|
| BOILING RANGE:                   | 171 - 175°C (339 - 348°F) |
| FREEZE POINT:                    | -18°C (0°F)               |
| SPECIFIC GRAVITY (Water = 1):    | 1.12                      |
| POUNDS/GALLONS                   | 9.3                       |
| VAPOR PRESSURE (mm of Hg) @ 20C: | <0.1                      |
| VAPOR DENSITY (air=1):           | 2.1                       |
| WATER SOLUBILITY:                | Complete                  |
| EVAPORATION RATE (BuAc = 1):     | Nil                       |
| % VOLATILE BY VOLUME:            | 97.0                      |
| APPEARANCE:                      | Green                     |
| ODOR:                            | Mild                      |

## 10. STABILITY and REACTIVITY

|                                   |   |
|-----------------------------------|---|
| STABILITY:                        | Stable  |
| CONDITIONS TO AVOID:              | Isolate from oxidizers, heat & open flame.                                  |
| MATERIALS TO AVOID:               | Isolate from strong oxidizers such as permanganates, chromates & peroxides. |
| HAZARDOUS DECOMPOSITION PRODUCTS: | Carbon monoxide, carbon dioxide from burning.                               |
| HAZARDOUS POLYMERIZATION:         | Material is not known to polymerize.  |

## 11. TOXICOLOGICAL INFORMATION

**SKIN:** The dermal LD50 has not been determined.

**INGESTION:** The lethal dose in humans is estimated to be 100 ml (3 ounces). The oral LD50 for rats is in the 6000-13,000-mg/kg range.

**MUTAGENICITY (THE EFFECTS ON GENETIC MATERIAL):** In vitro mutagenicity studies were negative. Animal mutagenicity studies were negative.

### SIGNIFICANT DATA WITH POSSIBLE RELEVANCE TO HUMANS

Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. The no-effect doses for developmental toxicity for ethylene glycol given by gavage over the period of organogenesis has been shown to be 150 mg/kg/day for the mouse and 500 mg/kg/day for the rat. Also, in a preliminary study to assess the effects of exposure of pregnant rats and made to aerosols at concentrations of 150, 1000 and 25000 mg/m<sup>3</sup> for 6 hours a day throughout the period of organogenesis, teratogenic effects were produced at the highest concentration, but only in mice. The conditions of these latter experiments did not allow a conclusion as to whether the developmental toxicity was mediated by inhalation of aerosol percutaneous absorption of ethylene glycol from contaminated skin, or swallowing ethylene glycol as a result of grooming the wetted coat. In a further study, comparing effects from high aerosol concentration by whole-body or nose-only exposure, it was shown that nose-only exposure resulted in maternal toxicity (1000 and 25000 mg/m<sup>3</sup>) and developmental toxicity with minimal evidence of teratogenicity (2500 mg/m<sup>3</sup>). The no-effects concentration (based on maternal toxicity) was 500 mg/m<sup>3</sup>. In a further study in mice, no teratogenic effects could be produced when ethylene glycol was applied to skin of pregnant mice over the period of organogenesis. The above observations suggest that ethylene glycol is to be regarded as an animal teratogen. There is currently no available information to suggest that ethylene glycol has caused birth defects in humans. Cutaneous application of ethylene glycol is ineffective in producing developmental toxicity. Exposure to high aerosol concentrations is only minimally effective in producing developmental toxicity. The major route for producing developmental toxicity is perorally. Two chronic feeding studies, using rats and mice, have not produced any evidence that ethylene glycol causes dose-related increases in tumor incidence or a different pattern of tumors compared with untreated controls. The absence of carcinogenic potential for ethylene glycol has been supported by numerous in vitro genotoxicity studies showing that it does not produce mutagenic or clastogenic effects.

A chronic dietary feeding study of diethylene glycol with rats showed mild kidney injury at 1%, while concentrations of 2% and 4% caused more marked kidney injury. In addition, at 2% and 4% of diethylene glycol in the diet, some rats developed benign papillary tumors in the urinary bladder. These have been attributed to the presence of urinary bladder calcium oxalate stones. No evidence for carcinogenicity was found with a chronic skin-painting study with diethylene glycol in mice. The absence of a direct chemical carcinogenic effect accords with the results in vitro genotoxicity studies that show that it does not produce mutagenic or clastogenic effects. A feeding study employing up to 5.0% diethylene glycol in the diet failed to produce any teratogenic effects. In a mouse continuous breeding study with large doses of diethylene glycol in drinking water, there was evidence for reproductive toxicity at 3.5% (equivalent to 6.1 g/kg/day) as reduced number of litter, live pups per litter and live pup weight. No such effects were seen at 1.75% (approximately 3.05 g/kg/day). The relevance of these very high dosages to human health is uncertain. Pregnant rats receiving undiluted diethylene glycol by gavage over the period of organogenesis had toxic effects at 4.0 and 8.0 ml/kg/day as mortality, decreased body weight, decreased food consumption increased water consumption and increased liver and kidney weights. Fetotoxicity was seen only at these maternally toxic dosages. Decreased fetal body weight occurred at 8.0 ml/kg/day, and increased skeletal variants at 4.0 and 8.0 ml/kg/day. No embryotoxic or teratogenic effects were seen. Neither maternal toxicity nor fetotoxicity occurred at 1.0 ml/kg/day. In a study with mice also receiving undiluted diethylene glycol over the period of organogenesis, maternal toxicity occurred at 2.5 and 10.0 ml/kg/day, but not at 0.5 ml/kg/day. Definitive developmental toxicity was not seen in this species.



## 12. ECOLOGICAL INFORMATION

### ENVIRONMENTAL FATE

**MOVEMENT & PARTITIONING:** Bioconcentration potential is low (BCF less than 100 or Log Kow less than 3). Log octanol/water partition coefficient (log Kow) is -1.36. Henry's Law Constant (H) is 6.0E-08 atm<sup>3</sup>/mol. Bioconcentration factor (BCF) is 10 in golden orfe.

**DEGRADATION & TRANSFORMATION:** Biodegradation under aerobic static laboratory conditions is high (BOD<sub>20</sub> or BOD<sub>28</sub>/ThOD greater than 40%). 5-Day biochemical oxygen demand (BOD<sub>5</sub>) is 0.78 p/p. 10-Day biochemical oxygen demand (BOD<sub>10</sub>) is 1.06 p/p. 20-Day biochemical oxygen demand (BOD<sub>20</sub>) is 1.15 p/p. Theoretical oxygen demand (ThOD) is calculated to be 1.29 p/p. Biodegradation may occur under both aerobic and anaerobic conditions (in either the presence or absence of oxygen). Inhibitory concentration (IC<sub>50</sub>) in OECD "Activated Sludge, Respiration Inhibition Test" (Guideline # 209) is < 1000 mg/L. Degradation is expected in the atmospheric environment within days to weeks.

**ECOTOXICOLOGY:** Material is practically non-toxic to aquatic organisms on an acute basis (LC<sub>50</sub> greater than 100 mg/L in most sensitive species). Acute LC<sub>50</sub> for fathead minnow (*Pimephales promelas*) is 51000 mg/L. Acute LC<sub>50</sub> for bluegill (*Lepomis macrochirus*) is 27549 mg/L. Acute LC<sub>50</sub> for rainbow trout (*Oncorhynchus mykiss*) is about 18000-46000 mg/L. Acute LC<sub>50</sub> for guppy (*Poecilia reticulata*) is 49300 mg/L. Acute LC<sub>50</sub> for water flea (*Daphnia magna*) is 46300-51100 mg/L. Acute LC<sub>50</sub> for the cladoceran *Ceriodaphnia dubia* is 10000-25800 mg/L. Acute LC<sub>50</sub> for crayfish is 91430 mg/L. Acute LC<sub>50</sub> for brine shrimp (*Artemia salina*) is 20000 mg/L. Acute LC<sub>50</sub> for golden orfe (*Leuciscus idus*) is greater than 10000 mg/L. Acute LC<sub>50</sub> for goldfish (*Carassius auratus*) is greater than 5000 mg/L. Growth inhibition EC<sub>50</sub> for green alga *Selenastrum capricornutum* is 9500-13000 mg/L.

## 13. DISPOSAL CONSIDERATIONS

**DO NOT** discharge to sewer. Wear appropriate personal protection. Take up with sand, vermiculite, or similar inert material. Dispose in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

U.S. D.O.T.

NON-BULK

Proper shipping name: ETHYLENE GLYCOL

BULK

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (ETHYLENE GLYCOL)

Technical name: ETHYLENE GLYCOL

ID Number: UN 3082

Hazard Class: 9

Packing Group: PG III

Reportable Quantity: 5,000 lb.

IATA

NON-BULK

Proper Shipping Name: Ethylene Glycol

Not Regulated by IATA

## 15. REGULATORY INFORMATION

THIS PRODUCT CONTAINS COMPONENT(S) CITED ON THE FOLLOWING REGULATIONS.

|                                      | <i>CHEMICAL NAME</i>   | <i>CAS NUMBER</i> |
|--------------------------------------|--|-------------------|
| UNITED STATES -<br>TSCA - Inventory: | Ethylene Glycol<br>Listed  | 107-21-1          |
| WATER STANDARDS:                     | No data available  |                   |
| ATMOSPHERIC<br>STANDARDS:            | Clean Air Act (1990) - List of Hazardous Air Contaminants: listed  |                   |
| CERCLA:                              | Reportable Quantity (RQ): 5,000 pounds (532 gallons)   |                   |
| SARA Title III:                      | <u>Section 311/312 - Categories:</u> Acute hazard; chronic hazard<br><u>Section 312 - Inventory Reporting:</u> Ethylene glycol is subject to Tier I and/or Tier II annual inventory reporting.<br><u>Section 313 - Emission Reporting:</u> Ethylene glycol is subject to Form R reporting requirements.<br><u>Section 302 - Extremely Hazardous Substances:</u> Ethylene glycol is not listed. |                   |

### STATE RIGHT-TO-KNOW:

|  |   |
|--|---|
| California - Exposure Limits - Ceilings: | vapor-50 ppm ceiling; 125 mg/m <sup>3</sup> ceiling |
| Director's List of Hazardous Substances: | listed  |
| Florida - Hazardous Substances List:     | listed  |
| Massachusetts - Right-to-Know List:      | listed  |
| Minnesota - Haz. Subs. List:             | listed (particulate and vapor)                      |
| New Jersey - Right-to-Know List (Total): | Present greater than 1.0%                           |
| Pennsylvania Right-to-Know List:         | environmental hazard                                |

### CANADIAN REGULATIONS:

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

### WHMIS INFORMATION: D2A - material has potential toxic effects.

Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

### California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains the following chemical(s) known to the State of California to cause cancer:

| Component     | CAS #    | Amount        |
|---------------|----------|---------------|
| 1,4 - Dioxane | 123-91-1 | < = 0.0086%   |
| Acetaldehyde  | 75-07-0  | < = 0.1000PPM |

**California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)**

This product contains the following chemical(s) known to the State of California to cause birth defects and/or other reproductive harm.

| <b>Component</b>                 | <b>CAS #</b> | <b>Amount</b> |
|----------------------------------|--------------|---------------|
| Ethylene glycol monomethyl ether | 109-86-4     | < =0.0009%    |

**California SCAQMD Rule 443.1 (South Coast Air Quality Management District Rule 443.1, Labeling of Materials Containing Organic Solvents)**

VOC: Vapor pressure 0.06 mmHg at 20°C  
1113.38 g/l

***16. OTHER INFORMATION***

Contact: Technical Department

Phone: (847) 559-2000

Old World Industries, Inc. makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by Old World Industries, Inc. as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does Old World Industries, Inc. assume liability arising out of the use by others of this product referred to herein. The data in this MSDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



# MATERIAL SAFETY DATA SHEET

NPCA

FOR COATINGS, RESINS AND RELATED MATERIALS  
(Approved by US Department of Labor Essentially Similar to Form OSHA 20)

Date Issued 11/28/05

## SECTION I

### MANUFACTURERS NAME

GARDNER ASPHALT CORPORATION

### STREET ADDRESS

4161 E 7<sup>TH</sup> AVENUE

### CITY, STATE, AND ZIP CODE

TAMPA, FL 33605

### EMERGENCY TELEPHONE NUMBER

1-800-424-9300

### PRODUCT CLASS

SIG SERIES FIBERED ASPHALT ROOF COATING A/F

AKA/FIBERED ROOF & FOUNDATION CTG.

### MANUFACTURER'S CODE

IDENTIFICATION

6124, 6125

### TRADE NAME

BLACKJACK

## SECTION II- HAZARDOUS INGREDIENTS

| INGREDIENT                             | PERCENT | TLV PPM | TLV Mg/M3   | LEL | VAPOR PRESSURE |
|--|---------|---------|-------------|-----|----------------|
| PETROLEUM ASPHALT<br>CAS # - 8052-42-4 | <70%    |         | 0.5<br>Fume |     |                |
| STODDARD SOLVENT<br>CAS #- 8052-41-3   | <30%    | 100     |             |     |                |
| CELLULOSIC FIBER<br>CAS #- 9004-34-6   | <5%     |         | 10          |     |                |
| KAOLIN CLAY<br>CAS #- 1332-58-7        | <3%     |         | 10*         |     |                |
| CALCINED CLAY<br>CAS #- 66402-68-4     | <3%     |         | 5.0         |     |                |

ADDITIONAL INFORMATION-\* AS RESPIRABLE DUST ONLY.

### Hazardous Materials Identification System (HMIS)

Health  
1

Flammability  
2

Reactivity  
0

Personal Protection  
C

## SECTION III - PHYSICAL DATA

BOILING RANGE: 300 °F - 390°F

VAPOR DENSITY  HEAVIER  LIGHTER, THAN AIR

EVAPORATION RATE  FASTER

SLOWER, THAN  
ETHER

PERCENT VOLATILE BY  
VOLUME 27 %

WEIGHT PER GALLON  
BY VOLUME 8.7 LBS

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY - NR

FLASH POINT- 105°F Minimum

EXTINGUISHING MEDIA-

FOAM, & DRY CHEMICAL, CARBON DIOXIDE.

UNUSUAL FIRE AND EXPLOSION HAZARDS-

KEEP AWAY FROM SOURCES OF IGNITION.

SPECIAL FIRE FIGHTING PROCEDURES-

RECOMMENDED FOR FIREFIGHTERS. WATER MAY CAUSE FROTHING, APPLY CAUTIOUSLY.

USE OF A SELF-CONTAINED BREATHING APPARATUS IS

## SECTION V – REACTIVITY DATA

STABILITY:  UNSTABLE  STABLE CONDITIONS TO AVOID: SPARK, FLAMES, ELECTRICAL AND STATIC DISCHARGE.

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZERS, ACIDS,

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE

HAZARDOUS POLYMERIZATION:  MAY OCCUR  WILL NOT OCCUR

CONDITIONS TO AVOID: NONE

## SECTION VI-HEALTH HAZARD DATA

**EFFECTS OF OVEREXPOSURE-** ACUTE: SKIN: PROLONGED REPEATED CONTACT MAY CAUSE IRRITATION. EYES: CONTACT MAY CAUSE IRRITATION, BLURRED VISION. INHALATION: EXCESSIVE BREATHING OF HIGH VAPOR CONCENTRATION CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, NAUSEA AND POSSIBLE UNCONSCIOUSNESS AND EVEN ASPHYXIATION. INGESTION: CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA. ASPIRATION OF MATERIAL INTO LUNGS CAN CAUSE CHEMICAL PNEUMONITIS, WHICH CAN BE FATAL. CARCINOGENICITY: NO. MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: PRE-EXISTING LUNG AND SKIN DISORDERS. REPRODUCTIVE EFFECTS: ND. TERATOGENIC: ND. MUTAGENIC: ND. **CALIF. PROP. 65 • CHEMICAL WARNING (CALIFORNIA HEALTH AND SAFETY CODE #25249.5 ET SEQ).** **WARNING:** This product contains chemicals known to the State of California to cause cancer, birth defects or reproductive harm. Read and follow label directions and information given on Material Safety Data Sheets and use care when handling or using all petroleum products.

**EMERGENCY FIRST AID PROCEDURE-** SKIN: WASH EXPOSED AREAS WITH SOAP AND WATER. EYES: FLUSH EYES WITH COPIOUS AMOUNTS OF WATER, IF SYMPTOMS PERSIST, CONSULT A PHYSICIAN. INHALATION: REMOVE PERSON TO FRESH AIR. IF BREATHING IS DIFFICULT ADMINISTER OXIGEN. IF BREATHING STOPS, GIVE ARTIFICIAL RESPIRATION. SEEK MEDICAL ATTENTION IMMEDIATELY. INGESTION: DO NOT INDUCE VOMITING.

## SECTION VII – SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: DIKE SPILL AREA, RECOVER FREE LIQUID. ADD ABSORBENT TO SPILL AREA. REMOVE SOURCES OF IGNITION. WASH AND VENTILATE AREA.

WASTE DISPOSAL METHOD: DISPOSE IN ACCORDANCE WITH LOCAL, STATE OR FEDERAL REGULATIONS.

## SECTION VIII – SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NOT NORMALLY REQUIRED IN WELL-VENTILATED AREA. IF TLV IS EXCEEDED, A NIOSH/MSHA APPROVED BREATHING APPARATUS IS RECOMMENDED.

VENTILATION: USE WITH ADEQUATE VENTILATION. MAINTAIN EXPOSURE BELOW TLV LEVEL.

PROTECTIVE GLOVES: NITRILE RUBBER GLOVES SHOULD BE USED.

EYE PROTECTION: SAFETY GOGGLES SHOULD BE USED.

OTHER PROTECTIVE EQUIPMENT: AS NECESSARY

## SECTION IX – REGULATORY INFORMATION

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE IN COOL DRY AREA.

OTHER PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN AND AWAY FROM SOURCES OF IGNITION. AVOID CONTACT WITH SKIN OR CLOTHING. KEEP CONTAINER CLOSED. WASH THOROUGHLY AFTER USING.

# SAFETY DATA SHEET

# DIAZINON 50WSP PCP 29976

IN CASE OF EMERGENCY DUE TO A MAJOR SPILL, FIRE OR POISONING INVOLVING THIS PRODUCT CALL DAY OR NIGHT, 1-800-561-8273 or CHEMTREC 1-800-424-9300

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

### MANUFACTURED FOR:

LOVELAND PRODUCTS CANADA, INC.  
789 Donnybrook Drive • Dorchester, Ontario N0L 1G5

24-Hour Emergency Phone: 1-800-561-8273  
Additional Emergency Phone (Canutec): 1-613-996-6666 (Collect)

CHEMICAL IDENTITY: Diazinon: O-O-Diethyl O- (2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate

PRODUCT USE: Insecticide – Group 1B

PCP REG. NO.: 29976

SDS Number: 29976-15-LPI

SDS Revisions: Section 1

Date of Issue: 09/20/15

Supersedes: 09/20/12

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – DANGER - POISON** – Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye injury. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating or smoking. Do not store near food or feed products. Do not contaminate ornamental fishponds. Do not use in and around homes or other residential areas such as parks, school grounds, or playing fields. For use only by certified users. **Warning: contains soy allergen.**

This product is off white to light brown powder with mild mercaptan (rotten egg) odour and is packaged in water soluble pouches.

### Warning Statements:

NOTE TO PHYSICIAN: This product contains Diazinon, an organophosphate insecticide that inhibits cholinesterase. Atropine is antidotal and should be given in multiple doses as necessary until the patient is atropinized. In severe cases 2-PAM may be given provided therapy begins within 24 hours of exposure. Monitor serum and RBC cholinesterase. Morphine, theophylline, aminophylline, phenothiazines, reserpine, furosemide, or ethacrynic acid are contraindicated in organophosphate poisonings. Administer intravenous fluids cautiously, if needed, to correct dehydration. Symptoms of cholinesterase inhibition can include headache, dizziness, blurred vision, weakness, nausea, cramps, diarrhea, discomfort in the chest, nervousness, sweating, miosis, tearing, salivation, pulmonary edema, uncontrollable twitches, convulsions, coma, and loss of reflexes and sphincter control.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

| <u>Chemical Ingredients:</u>                     | <u>Percentage by Weight:</u> | <u>CAS No.</u> | <u>TLV (Units)</u>           |
|--|------------------------------|----------------|------------------------------|
| Diazinon   | 50.00                        | 333-41-5       | 0.1 mg/m <sup>3</sup> (skin) |
| Inert Ingredients<br>(contains Calcium Silicate) | 50.00                        | 1344-95-2      | 0.05 mg/m <sup>3</sup>       |

## 4. FIRST AID MEASURES

|                                |   |
|--------------------------------|---|
| <b>If swallowed:</b>           | Call a poison control centre or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. |
| <b>If on skin or clothing:</b> | Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control centre or doctor for treatment advice.  |
| <b>If inhaled:</b>             | Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control centre or doctor for further treatment advice.   |
| <b>If in eyes:</b>             | Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.   |

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: **1-800-561-8273**. Have the product label or container with you when calling a poison control centre or doctor, or going for treatment.

## 5. FIRE FIGHTING MEASURES

|  |   |
|--|---|
| <b>FLASH POINT (°F/Test Method):</b>       | Does not flash.   |
| <b>FLAMMABLE LIMITS (LFL &amp; UFL):</b>   | Not established.  |
| <b>EXTINGUISHING MEDIA:</b>                | Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide, foam, water spray or fog.   |
| <b>HAZARDOUS COMBUSTION PRODUCTS:</b>      | Thermal decomposition products include, but are not limited to, oxides of sulfur and phosphorus containing compounds. Incomplete combustion may lead to formation of carbon monoxide and other asphyxiants. |
| <b>SPECIAL FIRE FIGHTING PROCEDURES:</b>   | Wear self-contained breathing apparatus and full protective gear.   |
| <b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b> | If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Do not allow water runoff to enter nearby streams, ponds or lakes.                                  |