

Revision 6

Revision Date: 11/19/08

Supercedes: 11/4/08

Section 2 – Hazards identification

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

Emergency Overview:

Aerosol: DANGER: Flammable. Contents under pressure. Harmful or Fatal if Swallowed.

Bulk: CAUTION: Combustible Liquid and Vapor. Keep away from heat and flame. Harmful or Fatal if Swallowed.

Primary route(s) of entry: Skin and Eye contact. Inhalation.

Potential Acute Health Effects:

Eyes:

Irritating to eyes

Skin:

Repeated exposure may cause skin dryness or cracking.

Inhalation:

Excessive inhalation of vapors can cause irritation of the respiratory tract, nausea, dizziness or

headache.

Ingestion:

Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea,

vomiting, and gastrointestinal irritation. May cause injury if aspirated into lungs.

Potential Chronic Health Effects:

Carcinogenic Effects: NTP: No OSHA: No ACGIH: No

Mutagenic Effects: None

Teratogenic Effects: None

Medical conditions aggravated by exposure:

Persons with pre-existing central nervous system (CNS) disease, neurological conditions, skin disorders, chronic respiratory diseases, or impaired liver or kidney function should avoid exposure.

Signs and Symptoms:

Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis). Breathing of high vapor concentrations may cause headaches, stupor, irritation of throat and eyes, and kidney effects.

Section 3 – Compositon / Information on Ingredients

| INGREDIENT NAME | CASRN | Weight Percent |
|--|------------|----------------|
| Distillates (Petroleum), Hydrotreated Light | 64742-47-8 | 70-80% |
| Distillates (Petroleum), Hydrotreated Middle | 64742-46-7 | 20-30% |
| Carbon Dioxide | 124-38-9 | 1-5 % |



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Section 4 - First Aid Measures

Eyes: Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and

evelid tissue. Do not use eye ointment. Seek medical attention immediately.

Skin: Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. Do

not use ointments. Seek medical attention if irritation persists.

Inhalation: Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If

heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek

medical attention immediately.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth

to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Do not leave victim unattended.

Seek medical attention immediately.

Section 5 – Fire Fighting Measures

Products of Combustion: Carbon monoxide and carbon dioxide.

Firefighting media: Use CO2, dry chemical powder, water spray, fog or foam. Cool containing vessels with water jet

in order to prevent pressure build-up, auto ignition or explosions.

Sensitivity to Impact: None. Sensitivity to Static Discharge: None.

Protection Clothing (Fire): wear protective clothing and equipment suitable for the surrounding fire, including helmet, face mask, and self-contained breathing apparatus.

Special Remarks on Explosion Hazards: High heat will cause product to boil, evolving vapor that could cause explosive rupture of closed containers. Aerosols may explode upon heating, spread fire and overcome sprinkler systems.

Section 6 - Accidental Release Measures

Containment Procedures

Contain and recover spilled liquid when possible.

Clean-Up Procedures

Small Spill and Leak:

Absorb with an inert material and dispose of properly.

Large Spill and Leak:

Secure the area and control access. Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for disposal using absorbent pads, sand, or other inert non-

combustible absorbent materials. Place into appropriate waste

containers for later disposal.

Evacuation Procedures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away.

Special Procedures

Remove all sources of ignition. Ventilate area. Wear appropriate protective equipment during

cleanup.



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Section 7 - Handling and Storage

Handling: DO NOT spray into or around ignition sources. Do not allow material to come into contact with eyes or skin. Wear appropriate protective equipment during handling. Keep container closed. Do not breathe vapors or mists. Use only with adequate ventilation. Wash thoroughly after handling.

Storage: Keep container in a cool, well-ventilated area. Avoid all sources of ignition (spark or flame). Store below 120°F

Precautions to be taken in handling and storage: *Store aerosols as Level 3 Aerosol (NFPA 30B).* Store all materials in dry, well-ventilated area. Avoid breathing vapors.

Section 8 - Exposure Controls / Personal Protection

Exposure Guidelines:

| Component | CASRN | OSHA TWA-PEL | OSHA STEL | ACGIH-TLV | ACGIH- STEL | NIOSH REL |
|---|------------|-------------------------------------|--------------------|--------------------|--------------------|--------------------------------|
| Distillates (Petroleum), Hydrotreated Light | 64742-47-8 | 100 ppm* 525 mg/m ³ * | Not Established | Not Established | Not Established | Not Established |
| Distillates (Petroleum), Hydrotreated Middle | 64742-46-7 | 5 mg/m ³ | Not Established | 5mg/m ³ | Not Established | Not Established |
| Carbon Dioxide | 124-38-9 | 5000 ppm | 30000 ppm | 5000 ppm | 30000 ppm | 5000 ppm TWA 30000 ppm STEL |

^{*} Supplier Recommendation

Engineering measures

Provide general and/or local exhaust ventilation to keep exposures below the exposure guidelines listed above.

Personal protective equipment

Eye protection

Safety glasses with side shields conforming to appropriate regulations. Eye wash fountain

and emergency shower facilities are recommended.

Hand protection

Normally no hand protection is required; however, if product will be sprayed for an extended period, "overspray" onto skin may occur. If so, use chemical resistant gloves (i.e., nitrile, neoprene, buna) conforming to appropriate regulations. Please observe the instructions regarding permeability and breakthrough time that are provided by the supplier of the gloves.

Respiratory protection

Typical use of this product under normal conditions does not require the use of respiratory protection. If airborne concentrations are above the applicable exposure limits (listed above), use NIOSH approved respiratory protection (i.e., organic vapor cartridge).

General Hygiene Considerations

Wash throughly after handling. Have eye-wash facilities immediately available.



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Section 9 – Physical and Chemical Properties

Appearance:

Liquid.

Color:

Pale amber.

Odor/Taste:

Characteristic.

Vapor Pressure:

< 0.05mmHg @ 20 °C

Solubility Description:

Not soluble in water.

Evaporation Rate:

<0.1(BuAc=1)

Boiling Point:

213°C (415°F)

Flash Point:

79°C (174°F)

Specific Gravity (Water=1):

0.79-0.81 @ 20 °C

Flash Point Method:

Tag-Closed Cup.

Vapour Density (air=1):

>1

Auto Ignition

>228°C (442°F)

Temperature (°C):

V.O.C. Content:

< 25%, 0 g/L per CARB definition

Partition Coefficient (octanol/water):

<1

Flammable limits (estimated):

LOWER: 0.6% UPPER: 7%

Viscosity:

<3.8 cSt @ 25°C

pH:

Not applicable

Odor threshold

Not Determined

Melting Point

<-50°C

Volatiles:

95 - 96%

Decomposition Temperature Not Determined

Section 10 - Chemical Stability and Reactivity

Chemical Stability:

Product is stable under recommended storage conditions.

Conditions to Avoid:

Keep away from heat and ignition sources.

Incompatibility:

Reactive or incompatible with oxidizing agents.

Hazardous Decomposition:

Combustion will generate smoke, possibly thick and choking, resulting in zero visibility and

combustion products include carbon monoxide and carbon dioxide.

Hazardous

Will not occur.

Polymerization:

Section 11 - Toxicological Information

A: General Product Information

An acute toxicity study of this product has not been conducted. Information given in this section relates only to individual constituents contained in this preparation.

B: Component Analysis

| Ingredients | CASRN | LC-50 | LD-50 | |
|---|------------|---------------------------|-------------------------|--|
| Distillates (Petroleum), Hydrotreated Light | 64742-47-8 | >6.8 mg/L (Supplier Data) | >5 g/kg (Supplier Data) | |
| Distillates (Petroleum), Hydrotreated Middle | 64742-46-7 | Not established | Not established | |
| Carbon Dioxide | 124-38-9 | Not established | Not established | |



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Section 12 - Ecological Information

Mobility:

Semi-volatile. Readily absorbed

into soil.

Persistence and degradability:

Only slightly biodegradable.

Bioaccumulative potential:

No bioaccumulation potential

Other adverse effects:

None known.

Ecotoxicology:

| Effect on Organisms | Component | CASRN | Test | Species | Results |
|----------------------------|---|------------|------------------------|------------------------|-----------|
| Acute Toxicity on Fishes | Distillates (Petroleum), Hydro treated Light | 64742-47-8 | 96-hr LC ₅₀ | Oncorhynchus mykiss | 3200 ug/L |
| Acute Toxicity on Daphnia | | | | | |
| Bacterial inhibition | No Data Available | | | | |
| Growth inhibition of algae | | | | | |
| Bioaccumulation in fish | | | | | |

For the 64742-47-8 component, no toxicity has been observed in water due to extremely low water solubility. If material is spilled on soil, some potential toxic effects could occur before biodegradation could remove material.

If spilled, the 64742-46-7 constituent may kill grasses and small plants by interfering with transpiration. Spilled material may coat gill structures of fish resulting in suffocation if spilled in shallow, running water. This product may be toxic to amphibians by preventing dermal respiration. This product may also cause gastrointestinal distress to birds and mammals through ingestion. Biodegradation of this product is possible within 90 to 120 days in aerobic environments at temperatures above 21 C.

Section 13 - Disposal Considerations

Waste Status:

Aerosol products, if depressurized and emptied to less than 2.5 cm of fluid contents are classified as non-hazardous waste under 40 CFR 261.7 (U.S.). If disposed of in its received form, this item carries

waste code D003. (U.S.)

Disposal:

Waste must be disposed of in accordance with national, regional and local environmental control

regulations.

Note:

Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and

local waste disposal requirements may be more restrictive than federal laws and regulations.



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Section 14 – Transportation Information

<u>Aerosol</u>

| | Shipping Name: | Consumer Commodity | UN Number: | NA |
|--|--------------------------|-----------------------|----------------------|-------------------------|
| D.O.T. Ground Hazard Class: ORM-Subclass: NA | | ORM-D | Technical Name: | NA |
| | | NA | Hazard Label: | ORM-D Already on box |
| | UN no: | 1950 | ADR Class: | 2 |
| Road/Rail - | Packing group: | NA | Classification code: | 5F |
| ADR/RID Name and Description: | | AEROSOLS, Flammable | Hazard ID no: | NA |
| | Labeling: | 2.1 | | |
| | UN no: | 1950 | Class: | 2.1 |
| Shipping Name: | | AEROSOLS | Subsidiary Risk: | 2.1 |
| IMDG-IMO | Packing Instructions: | P003, LP02 | Packing group: | NA |
| Marine pollutant: | | NO | EmS: | F-D, S-U |
| | UN no: | 1950 | Class: | 2.1 |
| | Shipping Name: | AEROSOLS, Flammable | Subclass | NA |
| IATA-ICAO | Packing instructions: | 203, Y203 (Ltd. Qty.) | Packing group: | NA |
| | Labeling: | Flammable Gas | | |

Bulk versions of this product are not regulated by any mode of transportation.

Section 15 - Regulatory Information

U.S. Federal Regulations

RCRA Hazardous Waste No.: D003 (aerosols only)

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): None

Toxic Substances Control Act (TSCA):

All components of this product are TSCA inventory listed and/or are exempt.

Superfund Amendments and Reauthorization Act (SARA) Title III

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Sudden Release of Pressure (aerosols only), Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):No individual section 313 component is present at or above 1%

Section 112 Hazardous Air Pollutants (HAPs): None



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State Regulations

New Jersey RTK:

Aerosol: Distillates Petroleum, Hydrotreated Light 64742-47-8 • Distillates Petroleum, Hydrotreated Middle 64742-46-7• Carbon Dioxide 124-38-9 • Calcium Sulfonate 61789-86-4 • Sorbitan Trioleate 26266-58-0

Bulk: Distillates Petroleum, Hydrotreated Light 64742-47-8 • Distillates Petroleum, Hydrotreated Middle 64742-46-7 • Calcium Sulfonate 61789-86-4 • Sorbitan Trioleate 26266-58-0 • C18 Unsaturated Dimer Fatty Acids 61788-89-4

California: This product does <u>not</u> contain chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm.

California and OTC States: This product conforms to consumer regulations.

International Regulations

Canadian Environmental Protection Act: All of the components of this product are included on the Canadian Domestic Substances list (DSL).

Canadian Workplace Hazardous Materials Information System (WHMIS):

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.

WHMIS Classification: Aerosol Class A, Class B5, Class D2B







WHMIS Classification: Bulk Class B3, Class D2B





Other Regulations

Montreal Protocol listed ingredients: Stockholm Convention listed ingredients: Rotterdam Convention listed ingredients:

RoHS Compliant:

None.

None.

None.

Yes.

Section 16 • Other Information

| | HMIS 1996 | | HMIS III | | NFPA |
|---|-----------------|---|--------------------------|------|---------------------|
| MSDS# 10116 Responsible Name: | Health: | 1 | Health: | [/]1 | Flammability |
| Clea Johnson Regulatory Affairs Coordinator | Flammability: 2 | 2 | Flammability: | 2 | 2 |
| | Describite | 0 | Physical Hazard: aerosol | 2 | Health 0 Reactivity |
| | Reactivity | U | Physical Hazard: bulk | 0 | $\overline{}$ |

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.

Clea Johnson, Regulatory Affairs Coordinator LPS Laboratories, A division of Illinois Tool Works