

MATERIAL SAFETY DATA SHEET
DCHE-5767 -- HOSE END DECK CLEANER

Section 1. Supplier Information

CMI Chemical Corporation
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Brighton, MI 48116
(248) 587-5600
Emergency Telephone: 1-800-424-9300

Section 2. Hazardous Ingredients

<u>Hazardous Component(s)</u>	<u>CAS #</u>	<u>PEL TWA</u>	<u>PEL Ceiling</u>	<u>TLV TWA</u>	<u>TLV STEL</u>	<u>MFG Limits</u>	<u>WGT %</u>
Phosphoric acid	7664-38-2	1 mg/m3	N/E	1 mg/m3	3 mg/m3	N/E	< 45
Quaternary amine compound	Proprietary	N/E	N/E	N/E	N/E	N/E	< 5

N/A = Not Applicable; N/E = Not Established; * = Mists; # = Skin; ' = Respirable Dust; " = Total Dust; ^ = Vapor; ** = Fumes; C = Ceiling Limit

All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory and the Canadian Domestic Substances List (DSL), or are exempt from the listing.

Section 3. Hazards Identification

Primary Routes of Entry

Inhalation: YES
Skin: YES
Ingestion: YES

Hazardous Materials Information System (HMIS) Ratings

Health: 3
Fire: 0
Reactivity: 1
0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe
* = Chronic Hazard

Signs of Symptoms of Exposure:

INHALATION: Exposure to mists may cause coughing, sneezing, and other symptoms of respiratory tract irritation. Overexposure may result in lung tissue damage due to corrosive effects.

SKIN: Can be a severe skin irritant. May be corrosive and cause severe burns if not washed immediately.

EYES: This product is destructive to eye tissues on contact. Will cause severe burns that result in damage to the eyes and even blindness.

INGESTION: This product, if swallowed, can cause severe burns and complete tissue perforation of mucous membranes of the mouth, throat, esophagus, and stomach.

Chemical Listed as Potential Carcinogens:

NTP: NO

IARC: NO

OSHA: NO

Target Organs: Eyes, skin, respiratory, and digestive system.

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Section 4. Emergency And First Aid Procedures

INHALATION: If adverse effects such as dizziness, nausea, or irritation are noted, move person to fresh air. If not breathing, give artificial respiration. Get medical attention!

SKIN: Immediately wash skin with large amounts of soap and water. Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing.

EYES: THE OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY, THEN SEEK MEDICAL ATTENTION! Immediately flush eyes with large amounts of water for at least 15 minutes, holding lids apart to ensure flushing of the entire surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. **SEEK MEDICAL ATTENTION IMMEDIATELY!**

INGESTION: DO NOT INDUCE VOMITING! Contact a physician immediately!

Section 5. Fire Fighting Measures

Flash Point: None.

Method Used: N/E

Flammable Limits in Air % by Volume: LEL: N/E

UEL: N/E

Extinguisher Media: Water, dry chemical, foam, or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear a self-contained breathing apparatus with a full facepiece operated in pressure demand or other positive pressure mode, and protective clothing.

Unusual Fire And Explosion Hazards: Contact with metals may produce flammable hydrogen gas.

Section 6. Accidental Release Measures

If material is spilled, absorb with sand, earth, or similar inert material. Place in closed, labeled containers for proper disposal.

CERCLA (Superfund) Reportable Quantity (in lbs) RQ Phosphoric acid = 5,000 lbs. For product, RQ - 12,578 lbs. (1,025 gallons).

Section 7. Handling and Storage

Handling: Avoid contact with skin and eyes; wash thoroughly after handling. Avoid breathing vapor; use with adequate ventilation.

Storage: Store in a dry location at room temperature. Keep container closed and maintain all original markings and labels. Contact with water or moist (humid) air will evolve flammable gas or vapors. Use a vented container. A clogged vent may increase pressure build up.

Other: If this solution is mixed with water, heat will be given off. When diluting, always add this solution to water **SLOWLY** with constant mixing, in order to avoid splattering.

Section 8. Exposure Controls and Personal Protection

Respiratory Protection: Use NIOSH / MSHA approved respirator where high vapor or mist concentrations are present.

Local Exhaust: None normally required. Local exhaust may be needed under special circumstances such as poorly ventilated areas, evaporation from large surfaces, spraying, heating, etc.

Mechanical Exhaust: Mechanical ventilation should be sufficient to maintain exposure levels below exposure limits.

Protective Gloves: Wear chemical resistant gloves.

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Eye Protection: Safety glasses with side shields. Do NOT wear contact lenses. Chemical goggles and/or faceshield should be worn where splashing is possible.

Other Protection: Eye wash and safety shower should be readily available.

Hygienic Practices: Avoid contact with skin and avoid breathing vapors or mist. Do not eat, drink, or smoke while using this product. Wash up prior to eating, drinking, or using the restroom.

Section 9. Physical and Chemical Properties

Boiling Point: ~ 212 ° F

Specific Gravity (H₂O=1): 1.2 - 1.3

Vapor Pressure (mm Hg): Similar to water.

Vapor Density (air=1) Similar to water.

Solubility in Water: Complete.

Reactivity in Water: Exothermic ; will generate heat!

Weight per Gallon (lb/gal): 10.5 - 10.6 lbs/gal

% Volatile by Volume: > 90

% Solid by Weight: < 10

Appearance and Odor: Clear, colorless to pale yellow, odorless liquid.

Theoretical VOC: 0 lbs/gal
(>0.1 mm Hg @ 20 ° C)

Analytical VOC : 0 lbs/gal
(EPA method 24)

pH: < 1

Degree of water solubility:
Negligible = Less than 0.1%
Slight = 0.1% - 1%
Moderate = 1% - 10%
Appreciable = More than 10%
Complete = 100%

Section 10. Stability and Reactivity

Stability: Stable. Hazard Polymerization: Will not occur.

Conditions to Avoid: Do not mix with strong bases! Generates lots of heat, possibly steam.

Incompatibility (Materials to Avoid): Avoid contact with metals (generate hydrogen gas), or materials containing sulfides or sulfites (generate toxic gases).

Hazardous Decomposition Products: Oxides of phosphorous and carbon.

Section 11. Toxicological Information

Phosphoric acid [CASRN 007664-38-2]

ACUTE TOXICITY

Oral LD50 (rat) > 4,400 mg/kg Eye irritation (rabbit): Severe irritant, corrosive

Dermal LD50 (rabbit) > 3,160 mg/kg Skin irritation (rabbit): Severe irritant, corrosive

Inhalation LC50 (rat)** > 850 mg/m³, 1hr

Chronic Toxicity: Phosphoric acid has produced no genetic changes in standard tests using bacterial cells.

Phosphoric acid has a low vapor pressure at room temperature and is not expected to present a significant inhalation hazard under ambient conditions. Phosphoric acid can, however, be irritating to the respiratory tract if inhaled as a mist or if the material is vaporized. A TLV has been

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established by ACGIH for phosphoric acid. [17,15-15,0,H,F-010600], [0,8-15,0,H,F-052300] & [18,8-15,0-1297]**

Section 12. Ecological Information

Phosphoric acid [CASRN 007664-38-2]

ECOTOXICITY 96 hr - LC50 (mosquitofish) = 138 mg/l, practically nontoxic

Phosphoric acid is practically nontoxic to one species of freshwater fish. No toxicity data was located for other freshwater species, algae, or Daphnia magna in a search of the available scientific literature. No specific biodegradation test data was located in a search of the available scientific literature. It was reported in the literature that while the acidity of this material may be reduced readily in natural water, the phosphate may persist indefinitely. [17,15-15,0,H,F-010600], [0,8-15,0,H,F-052300]

Quaternary amine compound [CASRN Proprietary]

ECOTOXICITY 96 hr LC50 (rainbow trout) = 30 mg/l 72 hr EC50 (algal) = 0.5 mg/l
48 hr EC50 (daphnia) = 13 mg/l [0,10-1,C,C,G-020201]

Section 13. Disposal Considerations

Waste Disposal Methods (Federal, State, Local):

In accordance with all federal, state and local requirements.

RCRA Hazardous Waste Number: D002

Section 14. Transport Information

Hazardous Material Description:

(Proper shipping name, hazard class, hazard ID#, packing group)

Domestic ground non-bulk: PHOSPHORIC ACID SOLUTION, 8, UN1805, PG III

Domestic ground bulk: RQ PHOSPHORIC ACID SOLUTION, 8, UN1805, PG III

International: PHOSPHORIC ACID SOLUTION, 8, UN1805, PG III

Section 15. Regulatory Information

SARA 313 Information This product contains the following chemical(s) above deminis concentrations and may be subject to reporting under section 313:

None.

Section 16. Other Information

This MSDS contains revisions in the following sections: New product

Prepared by: Andrew J. Thomas Chemist

Revised by: Andrew J. Thomas Chemist

The development of this Material Safety Data Sheet (MSDS) relies upon information provided to us by each of our raw material suppliers. This MSDS will be updated as changes occur to their MSDS(s).

We believe the recommendations and technical information contained herein to be accurate. However, they are given without warranty or guarantee, expressed or implied, and we assume no responsibility for losses or damage, direct or indirect, as a result of their use.