

KOP-COAT, INC
 PROTECTION PRODUCTS
 5137 SOUTHWEST AVENUE
 ST. LOUIS
 MO 63110

EMERGENCIES
 HEALTH/SPI LLS.: 800-548-0489
 CHEMTREC ASSI STANCE: 800-424-9300
 CHEMTREC OUTSI DE US: 703-527-3887
 CANUTEC.: 613-996-6666

KOP-COAT, INC
 PRODUCT I NFORMATI ON: 412-227-2700
 OUTSI DE USA.: 412-227-2700

 1 PRODUCT I DENTI FI CATI ON

PRODUCT NAME: ENACT(TM)
 PRODUCT USE.: Addi ti ve for anti sapstai n chemi cal s
 APPEARANCE.: Yel l owi sh suspensi on
 CAS NUMBER.: Mi xt ure
 SYNONYMS.: None

REVI SI ON.: 3
 DATE.: 7/16/09
 MSDS NUMBER: 90378

 2 HAZARDOUS I NGREDI ENTS

| HAZARDOUS COMPONENT | REG AGENCY | PPM | NOTES | MG/M3 | NOTES |
|--|-------------|-----|---------------------|-------|-------|
| Proprietary Organic Phosphonic Acids CAS NUMBER: TR SECRET-PHOS PERCENT BY WGT: 30 TO 35 | | | (None established.) | | |
| Organic Thiocyanate CAS NUMBER: TR SECRET-THIO PERCENT BY WGT: 1 TO 5 | | | (None established.) | | |
| Surfactant CAS NUMBER: TR. SECRET-SURF PERCENT BY WGT: 1 TO 5 | | | (None established.) | | |
| Phosphoric acid CAS NUMBER: 7664-38-2 PERCENT BY WGT: 1 TO 5 | ACGI H STEL | - | | 3 | |
| | ACGI H TWA | - | | 1 | |
| | NI OSH | - | | 1 | |
| | NI OSH STEL | - | | 3 | |
| | OSHA STEL | - | | 3 | |
| | OSHA TWA | - | | 1 | |

 3 HAZARDS I DENTI FI CATI ON

3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER! CORROSIVE. May cause eye and skin burns and respiratory tract irritation. May be fatal if swallowed. May cause allergic skin reactions.

EYES: CORROSIVE. Direct contact with liquid causes eye burns. May cause permanent damage without immediate first aid treatment.

SKIN: CORROSIVE. Direct contact with liquid causes skin burns. May cause permanent damage without immediate first aid treatment. May cause allergic skin reactions (sensitization).

INHALATION: Irritating to respiratory tract. Inhalation of vapors or mists may cause a burning sensation, coughing, and wheezing. Inhalation of mists may be fatal.

INGESTION: CORROSIVE. Swallowing can cause severe burns of the mouth, throat, and stomach, and can be fatal. Aspiration of this material into the lungs during swallowing or vomiting can cause chemical pneumonitis, which can be fatal.

CHRONIC EFFECTS: Continued exposure to excessive levels of vapors or mists may cause headache, nausea, dizziness and may decrease the affinity of blood for oxygen (methemoglobinemia). Prolonged or repeated dermal exposure to this product can cause skin dermatitis characterized by red, dry and scaly skin.

TARGET ORGANS: Blood, skin, eye(s), respiratory tract.

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

Medical Conditions Aggravated By Exposure: Anemia and skin, eye and respiratory tract system conditions.

4 FIRST AID MEASURES

EYE CONTACT: Immediately flush the eyes with lukewarm, gently flowing water for at least 20-30 minutes, by the clock, while holding the eyelids open. Remove contact lenses after the first five minutes, then continue rinsing eyes. Neutral saline solution may be used as soon as available. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting. Take care not to rinse contaminated water into the unaffected eye or onto face. If irritation persists, repeat flushing. Call a poison control center or doctor for treatment advice.

SKIN CONTACT: Flush contaminated area with lukewarm, gently flowing water for at least 20-30 minutes by the clock. If irritation persists, repeat flushing. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting. Under running water, remove contaminated clothing, shoes and leather goods

4 FIRST AID MEASURES

(e.g. watch-bands, belts). Call a poison control center or doctor for treatment advice. Discard contaminated leather goods and thoroughly decontaminate clothing, shoes, etc.

INHALATION: Remove to fresh air. If breathing has stopped, call 911, then have a trained person administer artificial respiration, preferably mouth-to-mouth. Call a poison control center or doctor for further treatment advice.

INGESTION: Call a poison control center or doctor immediately for treatment advice. Have person rinse mouth thoroughly with water. **DO NOT INDUCE VOMITING.** Have person drink 8 to 10 oz. (240-300 mL) of water to dilute material in stomach. If milk is available, it may be administered **AFTER** the water has been given. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Repeat administration of water. Quickly transport person to emergency care facility.

NOTE TO PHYSICIAN: Mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be required.

5 FIRE FIGHTING MEASURES

FLASH POINT: > 200F/93C

AUTOIGNITION TEMPERATURE: No information found.

FLAMMABLE LIMITS (% by volume/air)

Lower Limit: Not applicable.

Upper Limit: Not applicable.

EXTINGUISHING MEDIA: Use foam, alcohol, carbon dioxide, dry chemical, water.

FIRE FIGHTING PROCEDURES: As in any fire, wear complete fire service protective equipment, including full-face MSHA/NIOSH approved or equivalent self-contained breathing apparatus. Cool fire-exposed containers with water spray.

FIRE AND EXPLOSION HAZARDS: Thermal decomposition may produce toxic fumes. Flammable and toxic phosphine gas may be produced if heated above 200 C.

6 SPILL AND LEAK PROCEDURES

DANGER! Corrosive Material. Floors may become slippery. Wear appropriate protective equipment and NIOSH/MSHA approved respirator where mist or vapors of unknown concentrations may be generated (self-contained breathing apparatus preferred).

SPILL: Dike and contain spilled liquid with sand or earth and transfer the liquid and solid separately to containers for recovery or disposal. Keep spills

6 SPILL AND LEAK PROCEDURES

out of sewers and open bodies of water.

7 HANDLING AND STORAGE

HANDLING: Avoid breathing vapor or mists. Avoid contact with skin or eyes. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling.

STORAGE: Keep in a closed, labeled container within a cool (well-shaded), dry, ventilated area. Protect from physical damage. Keep containers closed when not in use. Do not contaminate water, food, or feed by storage or disposal.

OTHER: Showering and clothing change recommended at the end of each shift. Wash work clothes separately from other household clothing.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits. Ventilation rates should be matched to use conditions. Supplementary local exhaust ventilation may be needed in poorly ventilated spaces, during spraying, heating, or other non-routine activities.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: Industrial safety goggles, and faceshield, as necessary, when working with the concentrate.

HAND PROTECTION: Chemical-resistant, flexible-type gloves (neoprene, nitrile or equal) to prevent contact. Gloves should be rinsed and removed immediately after use. Wash hands after removing gloves.

SKIN PROTECTION: Industrial clothing, which may include long-sleeved shirt, long pants, chemical-resistant apron, footwear and socks.

RESPIRATORY PROTECTION: Respiratory protection may be necessary under certain use conditions. Under such conditions, a NIOSH/MSHA-approved respirator must be worn. If respirators are used, a program should be instituted to assure compliance with 29 CFR 1910.134 and 42 CFR 84.

OTHER: Facilities utilizing this material should be equipped with an eyewash station and safety shower. Thoroughly clean shoes and wash contaminated clothes before reuse.

9 PHYSICAL AND CHEMICAL PROPERTIES

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| | | | |
|--------------------------|----------------|---------------------|----------------|
| Weight Per Gallon (lbs): | 10.364 | % VOL by Weight.: | Not determined |
| Vapor Density.: | Not determined | Boiling Point. . .: | Not determined |
| Vapor Pressure: | Not determined | Evaporation Rate: | Not determined |
| pH.: | 1.0 | Specific Gravity: | Not determined |
| Solubility In Water: | Soluble | Viscosity.: | Not determined |
| VOC Content.: | 0.41 lb/gal | | |

10 STABILITY AND REACTIVITY DATA

STABILITY: Avoid temperatures greater than 140 F. Product is generally stable from 0 to 100 F.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY: Avoid strong oxidizers, strong bases.

HAZARDOUS DECOMPOSITION PRODUCT(S): Thermal decomposition may produce toxic organic vapors/fumes and oxides of carbon, nitrogen, phosphorus and phosphines.

11 TOXICOLOGICAL INFORMATION

This product has not been tested for toxicological effects.

12 ECOLOGICAL INFORMATION

This product is toxic to fish. Do not apply directly to water or wetlands. Do not contaminate water when disposing of equipment washwater.

13 DISPOSAL CONSIDERATIONS

Dispose of in compliance with all federal, state and local laws and regulations.

14 TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Corrosive liquid, acidic, organic, n.o.s., (Organophosphonic acid)

DOT HAZARD CLASS: 8, PG III

LABEL: Corrosive liquid

DOT IDENTIFICATION NUMBER: UN3265

15 REGULATORY INFORMATION

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No other information available.

16 OTHER INFORMATION

NOTICE: This document is generated for the purpose of distributing health, safety and environmental data. The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. Kop-Coat makes no warranty with respect thereto and disclaims all liability from reliance thereon.

Prepared by: Manager of Health, Safety and Environmental Affairs

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