

MATERIAL SAFETY DATA SHEET

Manufactured By:
Five Star Chemical Company
6731 E. 50th Ave.
Commerce City, CO 80022

Phone: 303-287-0186
MSDS Date: 12-15-10
Replaces: 01/01/08

IDENTIFICATION

PRODUCT NAME: STAR SAN
COMPOSITION: Solution of Phosphoric Acid and Dodecylbenzene sulfonic acid.

| HAZARDOUS INGREDIENTS: | % | ACGIH TLV | OSHA/PEL |
|--|----------|------------------|-----------------|
| Phosphoric Acid (75%) (CAS# 7664-38-2) | 50.0 | 1 mg/ m | 1 mg/M3(TWA) |
| Dodecylbenzene Sulfonic Acid (CAS# 27176-87-0) | 15.0 | N/A | |

(Other compositional information is considered a trade secret).

PHYSICAL DATA

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| APPEARANCE: Dark, amber liquid | SOLUBILITY IN WATER: Complete |
| ODOR: Slight | SPECIFIC GRAVITY: 1.36 |
| pH OF CONCENTRATE: 1 | FLASH POINT: TCC 121 deg F |
| EVAPORATION RATE: .9 (water=1) | |

FIRE AND EXPLOSION DATA

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| FLAMMABILITY: | TCC-121 deg F |
| EXTINGUISHING MEDIA: | Water, Carbon Dioxide, Foam |
| UNUSUAL FIRE AND EXPLOSION HAZARDS: | Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Contact with chlorine will evolve chlorine gas. |
| NFPA HAZARD RATING: | Health 3; Flammability 0; Reactivity 1 |

HEALTH HAZARD DATA

- **EYE CONTACT:** Corrosive to the eyes may cause severe damage.
- **INHALATION:** Irritating to the nose, throat, and respiratory tract.
- **INGESTION:** Harmful if swallowed. Swallowing product can cause severe burns to lining of throat and stomach
- **SKIN CONTACT:** Substance is corrosive. Causes severe skin burns.
- **SIGNS AND SYMPTOMS OF EXPOSURE:** Destruction to skin and eye tissue
- **SUPPLEMENTAL HEALTH INFORMATION: NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed.

EMERGENCY & FIRST AID PROCEDURES

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| EYE CONTACT: | Flush with cool running water for at least 15 minutes. For eye exposure irrigate with saline solution Get medical attention as soon as possible. |
| SKIN CONTACT: | Flush with cool running water. If irritation develops get medical attention. |
| INGESTION: | If conscious, give several glasses of milk, water, egg whites or gelatin solution. Get medical attention immediately. DO NOT induce vomiting. |
| INHALATION: | Move victim to fresh air. Call emergency medical care. Apply artificial respiration if victim is not breathing. |

SPECIAL PROTECTION INFORMATION

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| RESPIRATORY PROTECTION: | Atmospheric levels should be maintained below the exposure limits Listed in Hazardous Ingredients by using engineering controls. If not feasible, Use approved full face piece air-purifying respirator. |
| VENTILATION SYSTEM: | Provide general and/or local exhaust ventilation to maintain airborne levels below the exposure limits in Hazardous Ingredients. Refer to "Industrial Ventilation" by ACGIH for a manual of recommended practices. |
| SKIN PROTECTION: | If skin or contamination of clothing is likely, protective clothing should be worn. |
| EYE PROTECTION: | Chemical goggles are required. |
| PROTECTIVE GLOVES: | Wear chemical resistant gloves. |

REACTIVITY DATA

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| INCOMPATIBLE MATERIALS: | Alkalis, chlorinated products, and soft metals. |
| STABILITY: | Product is stable. |
| POLYMERIZATION: | Will not occur. |
| DECOMPOSITION PRODUCTS: | May give off phosphorous oxide at high heat (fire conditions). |

SPILL OR LEAK PROCEDURES

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| SPILL: | See Emergency/ First Aid Procedures and Special Protection Information for hazards and exposure controls. Dike with sand or earth to contain spill. Avoid ignition sources. Absorb with sand to other non-flammable material and transfer to approve DOT drum for recovery or disposal. |
| DISPOSAL: | Dispose of in accordance with local, state and federal regulations. |
| GENERAL: | CERCLA/SARA requires notification to the appropriate Federal state and local authorities of releases of hazardous or extremely hazardous quantities equal to or greater than the Reportable Quantities (RQs) in 50 CFR 302.4 and 40 CFR 355. SARA Title 313 requires submissions of annual reports of releases of toxic chemicals that appear in 40 CFR 372. Components present in this product at a level which could require reporting under statute are listed under identification. |

TRANSPORTATION

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| DOT HAZARD CLASSIFICATION: | Corrosive Liquid N.O.S. (Contains Phosphoric Acid and Dodecylbenzensulfonic Acid) 8, UN1760, PG III |
| US DOT LABEL: | Corrosive Liquid, UN 1760, Class 8 |
| LABEL REQUIRED: | Corrosive Liquid, Class 8 Label as required by OSHA Hazard Communication Standard, and any applicable state and local regulations. |

EMERGENCY TELEPHONE: INFOTRAC 800-535-5053