MATERIAL SAFETY DATA SHEET

Manufactured by:



Anderson Chemical Company

325 SOUTH DAVIS AVENUE LITCHFIELD, MINNESOTA 55355 (320) 693-2477 Health 2 0 Special Keactivity Hazard of Page NFPA Hazard Rating*

Name: Scale Kleen

| 24-HOUR EMERGENCY PHONE #: 1-800-424-9300 (CHEMTREC) | Revised: 5/1/2014 | Imt |
|--|----------------------|-----|
| | Supersedes: 1/3/2013 | |
| | | |

DOT Shipping Name

Chemical Name And Synonyms: Not applicable

Corrosive liquid, acidic, inorganic, n.o.s.(Phosphoric acid / Nitric Acid); This product can ship as a LTD QTY if packaged in <1.3 gallon containers(NonHaxardous)

| <u> </u> | |
|----------|---------|
| Chemical | Family: |

Acid

| DOT Hazard Class & I.D. Number | # | PG |
|--------------------------------|---|-----|
| Corrosive Material UN3264 | 8 | 111 |

| II. HAZARDOUS INGREDIENTS | | | | | | |
|---------------------------|-----------|-----|---------|---------|-------|-----------------------------|
| Component | CAS NO. | % | TLV | PEL | Toxic | Hazard |
| Phosphoric acid | 7664-38-2 | <15 | 1 mg/M3 | 1 mg/M3 | NA | Corrosive to skin and eyes. |
| Nitric Acid | 7697-37-2 | <3 | 5 mg/M3 | 5 mg/M3 | 313** | Corrosive to skin and eyes. |

**Toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR §372). NA: Not applicable NE: Not established

Boiling Point: Above 212° F Specific Gravity: 1.102 Appearance: Clear, pale pink liquid

Form: Liquid Solubility In Water: Complete

Odor: None

pH, 1% Soln.: 2.0

IV. FIRE AND EXPLOSION HAZARD DATA

III. PHYSICAL DATA

Flashpoint: Not Applicable

Extinguishing Media: Not combustible. Use media appropriate to surrounding fire.

Special Fire Although this product is not combustible, if a fire occurs in the near vicinity, good fire-fighting practice dictates the use of self-Fighting Procedures: contained breathing apparatus and other protective gear.

Unusual Fire And If the stock solution container breaks, the product should be handled with care as it is corrosive. May produce poisonous or irritating Explosion gas or fumes. This material is reactive with many materials. Hazards:

V. HEALTH HAZARD DATA

Carcinogenic: The raw materials used in this product are not considered to be a carcinogen by NTP, IARC, ACGIH, and OSHA.

Effects Of Corrosive. Can cause permanent damage to the cornea, blindness. Repeated or prolonged exposure to corrosive materials or fumes may cause Over-exposure: conjunctivitis. Causes severe skin burns. Repeated or prolonged exposure to corrosive materials will cause dermatitis. Ingestion causes corrosion, burns to mouth and esophagus, abdominal pain, chest pain, nausea, vomiting, diarrhea, seizures. Aspiration of the swallowed or vomited product can cause severe pulmonary complications. Repeated or prolonged exposure to corrosive materials or fumes may cause gastrointestinal disturbances. Inhalation may cause corrosive burns irreversible damage. Repeated or prolonged exposure to corrosive fumes may cause bronchial irritation with chronic cough.

Emergency And First Eyes: Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete rinsing. Get immediate medical Aid Procedures: attention.

Skin: Flush with water for 15 minutes. If irritation persists after rinsing, get medical attention. Remove contaminated clothing and wash before reuse.

Ingestion: Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to a semi-comatose, comvulsing or unconscious person.

Inhalation: Remove victim to fresh air. If breathing difficulty occurs or persists, get medical attention.

Page 2; Product Name: Scale Kleen

| Stability - Unstable: Conditions To Avoid: | Stable: X Contact with reactive metals, contact with alkaline materials, especially caustic soda and caustic potash. Also hypochlorite solution. |
|---|---|
| Incompatibility: (Materials to Avoid) | Fluorine, strong oxidizing agents, strong reducing agents, bases, metals, sulfur trioxide, phosphorus pentoxide |
| Hazardous Decomposition Products: | At flame temperatures, toxic phosphorous oxide and nitrogen oxide fumes may be emitted. |
| | VII. SPILL OR LEAK PROCEDURES |
| Steps To Be Taken In Cas | se Material Is Released Or Spilled: |
| - | Small spills can be diluted with large amounts of water and flushed to sanitary sewer. For large spills, Evacuate nonessential personnel. Wear appropriate personal protection equipment. Completely contain spilled material with dikes or sandbags, etc., and prevent run-off into ground or surface waters or sewers. Recover as much material as possible into containers for disposal. Remaining material may be diluted with water and neutralized with lime or other base. |

Neutralization products, both solid and liquid, must be recovered for disposal.

Waste Disposal Method: If material can not be salvaged, neutralize and then discharge into a treatment system in accordance with local, state and federal regulations.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: For severe mist, use NIOSH approved respirator and self-contained breathing apparatus.

Ventilation: Adequate to meet exposure limit for acid mist.

Protective Gloves: Rubber or neoprene. Eye Protection: Chemical goggles.

Protective Clothing: Skin contact should be prevented through use of suitable protective clothing, gloves and footwaear selected with regard for use conditions.

IX. SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling And Storing:

Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest. Wash thoroughly after handling. Wear protective clothing/equipment. Use with adequate ventilation. Keep containers tightly closed and properly labeled. This product reacts violently with bases liberating heat and causes spattering. Do not add water to product, add product to water with agitation. Store in a cool, dry, well-ventilated area. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or consume foods, beverages, tobacco in areas where this product is stored.

Other Precautions Safety showers and eyewash stations should be provided in the areas where this product is handled.

X. REVISED INFORMATION

MSDS Status: DoT changed (added LTD QTY exemption)

The opinions expressed herein are those of qualified experts within ANDERSON Chemical Company. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of ANDERSON Chemical Company, it is the user's obligation to determine the conditions of safe use of the product.

VI. REACTIVITY DATA