

VAPCO PRODUCTS DIV.**401 Marshall Road****Valley Park, MO 63088**

For Customer Service call: (636) 923.2121

Emergency Telephone: (800) 255-3924**SCALE REMOVER #2****HMIS: 3-0-1****NFPA: 3-0-1**Data Sheet: 115
Prepared: 12/28/05
Supersedes: 04/24/98

This Material Safety Data Sheet complies with OSHA Hazard Communication Standard 29 CFR 1910.1200.

SECTION 1: COMPOSITION / INFORMATION ON INGREDIENTS

If present, IARC, NTP, and OSHA Carcinogens, are identified with an asterisk (*) in this Section.

| <u>Ingredient(s)</u> | <u>Exposure Limits</u> | <u>Percent</u> | <u>Note</u> |
|--------------------------------------|------------------------|----------------|---------------------|
| Hydrochloric Acid CAS#: 7647-01-0 | PEL-TWA 5 ppm | >95% | PEL - ceiling 5 ppm |

SECTION 2: HAZARDS IDENTIFICATION**Permissible Exposure Limits:** Not established for this product. See Section 1 for Component PELs and TLVs.**Effects of Acute Overexposure:****Eyes:** Exposure to liquid, vapor or mist may cause severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and eye damage. Burning may not be immediately painful or visible. Prolonged or repeated exposure may cause irreversible eye damage including corneal damage and blindness.**Skin:** Exposure to liquid, vapor, or mist may cause severe skin irritation. Symptoms may include redness, burning and severe skin damage. Prolonged or repeated exposure may cause irreversible skin damage including burns. Skin absorption is unlikely.**Breathing:** Exposure is possible under certain conditions such as spraying. Prolonged or repeated exposure may cause irreversible respiratory tract damage.**Swallowing:** Exposure may be harmful or fatal. Symptoms may include: severe gastrointestinal irritation (diarrhea, nausea, and vomiting) and burns to the mouth, throat, and digestive tract.**Primary Route(s) of Entry:** Skin contact, eye contact, and inhalation.**Effects of Chronic Overexposure:** None known. The components in this material are not listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.**Medical Conditions Aggravated by Exposure:** Skin contact may aggravate existing dermatitis or other significant skin conditions.

Inhalation may adversely affect existing respiratory conditions.

SECTION 3: FIRST AID MEASURES**Eyes:** Immediately remove individual from exposure area into fresh air. Flush eyes with water for at least 30 minutes while holding eyelids apart. Seek immediate medical attention.**Skin:** Remove contaminated clothing immediately. Wash exposed area with large amounts of soap and water. If skin is damaged or symptoms develop, seek immediate medical attention.**Breathing:** If affected, remove individual to fresh air. If breathing is difficult, administer oxygen (if you have been trained in its use). If breathing has stopped, give artificial respiration. Keep person, warm, quiet and get immediate medical attention. If possible do not leave person unattended.**Swallowing:** Do not induce vomiting. Vomiting will cause further damage to the mouth and throat. If the individual is conscious and alert, immediately rinse mouth with water and dilute the swallowed material with milk or water. Seek immediate medical attention.**SECTION 4: FIRE FIGHTING MEASURES****Flash Point:** >212 °F (component) by TCC**Explosive Limit:** Not applicable**Extinguishing Media:** Water**Hazardous Decomposition Products:** May form toxic materials including, but not limited to the following: acid vapors, hydrogen gas, and chlorine compounds.**Fire Fighting Procedures:** Wear Self Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fire fighting.**Special Fire and Explosion Hazards:** Hydrochloric acid is corrosive. Hydrogen gas may be formed when this product comes in contact with metals. This product contains a large amount of water and will not burn under normal fire conditions.

SECTION 5: ACCIDENTAL RELEASE MEASURES

Small Spill: Absorb liquid with vermiculite, floor absorbent, or other absorbent material. Ventilate area well before re-entry. Appropriate personal protective equipment should be worn.

Large Spill: Only personnel trained in spill clean-up under 29 CFR 1910.120 should be involved with spill clean-up procedures. Prevent material from entering drains, sewers, streams, or other bodies of water. Prevent from spreading. If run-off occurs notify appropriate authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product on absorbent materials. Transfer contaminated absorbent and other materials to container for neutralization. Neutralize spilled material. Follow Local, State, and Federal regulations for proper disposal.

SECTION 6: HANDLING AND STORAGE

Minimize temperature extremes. Keep containers closed when not in use. Do not transfer to unmarked containers. Loosen closure carefully.

SECTION 7: EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Not required under normal conditions of use; however, if sprayed or used in confined areas, a NIOSH / MSHA approved respirator may be advised in absence of proper environmental control. OSHA regulations also permit other NIOSH / MSHA respirators under specified conditions -- see 29 CFR 1910.134 or your safety equipment supplier. Engineering and/or administrative controls should be implemented to reduce exposure.

Ventilation: Provide sufficient mechanical ventilation (general and/or local exhaust) to maintain exposure below the recommended exposure limits.

Protective Gloves: Wear chemical resistant gloves such as neoprene or rubber. Contact your safety equipment supplier.

Eye Protection: Chemical splash goggles and a face shield in compliance with OSHA regulations are advised.

Other Protective Equipment: To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES

| Property | Measurement | Property | Measurement |
|---------------------|------------------------------|-------------------|-------------------------|
| Boiling Point | 230 °F @ 60 mmHg (component) | Specific Gravity | 1.79 @ 77°F (component) |
| Vapor Pressure | 25.8 mmHg @ 70°F (component) | Percent Volatiles | 100 % |
| Vapor Density | Heavier than Air (Air = 1) | Evaporation Rate | Slower than Ether |
| Solubility In Water | Soluble | Appearance | Blue, liquid |
| pH | Acidic | | |

SECTION 9: STABILITY AND REACTIVITY

Hazardous Polymerization: Can not occur.

Stability: Stable.

Incompatibility: Avoid contact with strong alkalis, and organic materials. Corrosion can occur in contact with some metals and alloys. Do not mix with any products.

SECTION 10: TOXICOLOGICAL INFORMATION

No data available at this time.

SECTION 11: ECOLOGICAL INFORMATION

No data available at this time.

SECTION 12: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all Local, State, and Federal Regulations.

This product may be classified as an RCRA Hazardous Waste D002 due to the pH of the solution and the corrosive characteristics.

SECTION 13: TRANSPORTATION INFORMATION

DOT Hazard Classification: Hydrochloric acid solution, 8 (corrosive material), UN 1789, II

SECTION 14: REGULATORY INFORMATION

SARA Title III, Section 313 chemicals: Hydrochloric acid is subject to the reporting requirements. Hydrochloric acid can be found in this material at 99.9%.

SARA Title III, Section 312 Health -- Acute (Yes) Chronic (No) Fire (No) Reactivity (Yes). Proposition 65: None known.

SECTION 15: OTHER INFORMATION

Containers used to transport and store this material may be hazardous when emptied. Residue (Vapor, Liquid, and/or Solid) may be present in the emptied container. All hazard precautionary measures should be followed.

The information accumulated and reflected in this Material Safety Data Sheet is believed to be accurate but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.