

MATERIAL SAFETY DATA SHEET

Total Solutions
P.O. Box 240014
Milwaukee, WI 53224



GENERAL INFORMATION NUMBER: (414) 354-6417
CHEMTREC: (800) 424-9300

REVISION DATE: January 23, 2007
DATE OF ISSUE: January 23, 2007

I - Product Identification

Muriatic Acid Cleaner

PRODUCT CODE: 0140

CHEMICAL FORMULATION: Acid based cleaner.

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 1
HAZARD RATING: 4 - Extreme; 3 - High; 2 - Moderate; 1 - Slight; 0 - Insignificant

II - Hazardous Ingredients

Values reported as TWA unless noted.

SUBSTANCE	APPROX %	OSHA PEL	ACGIH TLV	EPA 40 CFR:			CAS #
				302	355	372	
Hydrochloric Acid	15.0-25.0	5 ppm C	5 ppm C	Y	N	Y	7647-01-0
Poly (oxyethylene) nonylphenol	< 2.00	N/E	N/E	N	N	N	9016-45-9

Key: PEL: Permissible Exposure Limit TLV: Threshold Limit Value C: Ceiling level STEL: Short Term Exposure Limit
N/A: Not Applicable N/D: Not Determined N/E: Not Established Y: Yes N: No
302: CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).
355: SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).
372: SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

III - Physical Data

BOILING POINT (°F): N/D SPECIFIC GRAVITY (WATER = 1): 1.10
VAPOR PRESSURE (mm Hg): N/D VOC CONTENT (% by weight): < 1.00
VAPOR DENSITY (AIR = 1): N/D EVAPORATION RATE (WATER = 1): N/D
SOLUBILITY IN WATER: Soluble pH: 1.0
APPEARANCE AND ODOR: Clear, light green liquid; characteristic acidic odor.

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): N/A (TEST METHOD): Closed cup
FLAMMABLE LIMITS IN AIR (VOLUME %) UPPER: N/D LOWER: N/D
EXTINGUISHING MEDIA: Water, foam, carbon dioxide, dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES: Cool fire exposed containers with water fog. Firefighters should be equipped with full protective gear including self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARD: Use water spray to cool fire-exposed containers. May produce toxic fumes when heated.

V - Reactivity Data

STABILITY: Stable**INCOMPATIBILITY:** Alkaline material, metals and metal salts.**CONDITIONS TO AVOID:** Do not mix with chlorine bleach, ammonia or any other cleaning chemicals. Do not spray to create mists. Do not heat to create vapors.**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce CO, CO₂, HCl and Cl₂.**HAZARDOUS POLYMERIZATION:** Will not occur.**CONDITIONS TO AVOID:** None

VI - Health Hazard Data

ROUTES OF ENTRY **INHALATION:** X **EYE CONTACT:** X **SKIN CONTACT:** X **INGESTION:** X
INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS: None.**EFFECTS OF OVEREXPOSURE****IF IN EYES:** Severe irritation, burns, destruction of tissue. May cause irreversible damage.**IF ON SKIN:** Severe irritation, burns, destruction of tissue. May cause permanent damage.**IF SWALLOWED:** Severe burns to mucous membranes, destruction of tissue, DANGER – May be fatal if swallowed.**IF INHALED:** Severe irritation to upper respiratory tract, pulmonary edema, laryngeal spasms.**EMERGENCY AND FIRST AID PROCEDURES****IF IN EYES:** Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. Obtain immediate medical attention.**IF ON SKIN:** Remove contaminated clothing. Flush with plenty of cool water for at least 15 minutes and cover exposed area with acid neutralizing solution or moist baking soda. Obtain medical attention.**IF SWALLOWED:** Contact physician or poison control center immediately. Do not induce vomiting. Never give anything to an unconscious person.**IF INHALED:** Remove person to fresh air. Administer artificial respiration, if breathing has stopped. Obtain medical attention.

VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area and contain spill. Soak up spilled material with inert absorbent material and place in a properly marked closed container for disposal. Rinse residue with a neutralizing solution.**WASTE DISPOSAL METHOD:** Consult local environmental authorities.

VIII - Special Protection Information

RESPIRATORY PROTECTION: Use with adequate ventilation. Do not breathe vapors or mists. If recommended Exposure Limits are exceeded wear a NIOSH approved respirator, following manufacturer's recommendations.**VENTILATION****LOCAL:** Recommended**MECHANICAL:** Recommended**PROTECTIVE GLOVES:** Acid resistant.**EYE PROTECTION:** Safety goggles and/or face shield.**OTHER PROTECTIVE EQUIPMENT:** Protective clothing, emergency shower and eye wash station.**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Corrosive material. Store in a cool, dry place away from alkaline materials and reactive chemicals. Do not mix with any other cleaning chemicals. Never add water to this product, always add this product to water, slowly stirring. Keep container tightly closed when not in use. Wash before eating, drinking or smoking.**OTHER PRECAUTIONS:** Keep out of reach of children.

IX - Transportation Information (ground transportation only)

DOT ID #: NA1760 **DOT PROPER SHIPPING NAME:** Compounds, cleaning liquid (Hydrochloric Acid).**DOT CLASS:** 8 **DOT PACKING GROUP:** III

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

REVISION DATE: January 23, 2007**Prepared by:** Technical Dept.**DATE OF ISSUE:** January 23, 2007

This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Total Solutions assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material such vendees or users assume all risks associated with the use of this material.