

SECTION 1 - MANUFACTURER INFORMATION

MANUF/DIST : CHEM-POWER MFG DIV/ FOSTER & CO., INC
15 Wing Drive EMERGENCY PHONE.....: 973-267-4100
Cedar Knolls PREPARATION/REVISION DATE: 02/14/02
NJ 07927
PREPARER/CONTACT: Gary Adams, Chemist
LOCATION : Whs 1

TRADE NAME/SYNONYMS...: CHEM SCALE
CHEMICAL NAME/SYNONYMS: Acid Cleaner, Descaler
CHEMICAL FAMILY.....: Acid Cleaner, Hydrochloric Acid based.
FORMULA.....: Mixture
PRODUCT CODE.....: 18-27

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS)

* HEALTH..... 3 *
* FLAMMABILITY.. 0 *
* REACTIVITY.... 1 *
* PROTECTION.... B *

SECTION 2 - HAZARDOUS INGREDIENTS

THIS PRODUCT CONTAINS HAZARDOUS INGREDIENTS : YES

CHEMICAL/COMMON NAME	CAS-NUMBER	%	PEL-OSHA	TLV-ACGIH
*Hydrochloric Acid	7647-01-0	<15	5 PPM	5 PPM
Citric Acid (USP)	77-92-9	<3	N/A	N/E
Nonylphenoxypolyethoxyethanol	26027-38-3	<2	N/A	N/E
Water (non-hazardous)	7732-18-5	>80	N/I	N/I

*this ingredient is reportable under EPA
SARA Title 111-please check applicable
states for additional regulations.
(for gas only)

THIS PRODUCT CONTAINS CARCINOGENS (NTP, IARC, or OSHA):NO

CHEMICAL/COMMON NAME	CAS-NUMBER	%	NTP	IARC	OSHA
N/A	N/A	N/A	N/A	N/A	N/A

SECTION 3 - HEALTH HAZARD DATA

HEALTH EFFECTS (Acute And Chronic)-
CORROSIVE: SEVERE IRRITANT TO EYES, SKIN and mucous membranes. Can lead
to burns on affected area. Prolonged or repeated exposure can cause permanent
scars or damage.

INGESTION: If swallowed, this material can cause burns to mouth, esophagus, and stomach followed by severe gastric distress.
INHALATION: If inhaled, vapors from this product can cause irritation to the respiratory tract and lungs possibly leading to chemical pneumonitis and other serious complications from tissue deterioration. Avoid breathing vapors.
CHRONIC INJURY: No information available. Expect chronic effects to be manifestations of acute injuries listed above.

PRIMARY ROUTES OF ENTRY-
Eyes, Skin, Inhalation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE-
Expect aggravation of respiratory disorders.

EMERGENCY FIRST AID PROCEDURES-

EYES: Speed of removal is important. Immediately flush with water for at least 15 minutes while alternately holding eyelids open to ensure flushing entire area of the eye. See physician at once. SKIN: Immediately flush with plenty of cool water. Remove contaminated clothing and wash before reuse. Call physician if irritation persists.
INHALATION: Move to uncontaminated area. Administer oxygen and provide artificial respiration if necessary. Call physician.
INGESTION: Do not induce vomiting. Give large quantities of water or Milk of Magnesia or water with Baking Soda if available and call poison control center or physician immediately.

SECTION 4 - CHEMICAL DATA

BOILING POINT (F).....: 215 SPECIFIC GRAVITY (WATER=1).....: 1.06
VAPOR PRESSURE (mmHg): 80 PERCENT VOLATILE BY VOLUME (%): 98
VAPOR DENSITY (AIR=1): 1 EVAPORATION RATE (water =1): 1

SOLUBILITY IN WATER-
100%

APPEARANCE AND ODOR INFORMATION-
Clear blue-green liquid with pungent sour odor.

SECTION 5 - PHYSICAL HAZARD DATA

FLASH POINT (Method Used): None. FLAMMABLE LIMITS : Lel=N/A UEL=N/A

EXTINGUISHING MEDIA-
Not combustible.

SPECIAL FIRE FIGHTING PROCEDURES-
Wear positive pressure self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS-
Reacts with metals to produce Hydrogen which may form explosive mixtures with air.

INCOMPATIBILITY (Materials To Avoid)-
Reducing agents. Aluminum, Zinc(galvanized), Magnesium.

HAZARDOUS DECOMPOSITION PRODUCTS-
Hydrogen Chloride gas.

WILL HAZARDOUS POLYMERIZATION OCCUR-
No.

CONDITIONS TO AVOID FOR POLYMERIZATION-
None known.

IS THE PRODUCT STABLE-
Yes.

CONDITIONS TO AVOID FOR STABILITY-
None known.

SECTION 6 - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED-
Wear proper equipment. Dike spill and neutralize with Soda Ash or Lime.
Flush with plenty of water.

WASTE DISPOSAL METHODS-
Consult Federal, State or local authorities. Should be limited hazard
when neutralized. Triple rinse containers and give to licensed reconditioner.
As supplied, this material would be considered a RCRA Hazardous Waste. Consult
Federal, State and Local authorities for prevailing rules in different areas.

SECTION 7 - EXPOSURE CONTROL INFORMATION

VENTILATION-
LOCAL EXHAUST: N/I
SPECIAL.....: Acid gas canister. MECHANICAL (General): At points
OTHER.....: Hard Hat

RESPIRATORY PROTECTION-
NOISH approved for acid fumes.

PROTECTIVE GLOVES-
Rubber, neoprene, polyethylene.

OTHER PROTECTIVE EQUIPMENT-
Face shield. Rubber boots, apron. Safety shower and eyewash facility.

OTHER ENGINEERING CONTROLS-
N/I

WORK PRACTICES-
Do not touch face with gloves when handling this product.

HYGIENIC PRACTICES-

Wash hands before using lavatory facilities or eating.

SECTION 8 - SPECIAL PRECAUTIONS
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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE-

Store in cool place away from caustics or other reducing agents.

MAINTENANCE PRECAUTIONS-

N/A

OTHER PRECAUTIONS-

Never put in aluminum, zinc or magnesium container. KEEP OUT OF REACH OF CHILDREN!

ADDITIONAL COMMENTS-

Shipping Name: Compound, Cleaning, Liquid (Hydrochloric Acid), Hazard Class 3, UN-1789, Packing Group 11, CORROSIVE label required.

FOR TRANSPORTATION EMERGENCY ONLY, CALL INFOTRAC 1-800-535-5053 **24** hr/7 days.