

MATERIAL SAFETY DATA SHEET

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

REVISION DATE: June 24, 2004
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I - Product Identification

Tower Treat "H"

PRODUCT CODE: 1933

CHEMICAL FORMULATION: Cooling tower treatment.

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 2

FLAMMABILITY: 0

REACTIVITY: 0

HAZARD RATING: 4 - Extreme; 3 - High; 2 - Moderate; 1 - Slight; 0 - Insignificant

II - Hazardous Ingredients

Values reported as TWA unless noted.

SUBSTANCE	APPROX	OSHA	ACGIH	EPA 40 CFR:			CAS #
	%	PEL	TLV	302	355	372	
Sodium Hydroxide	5.00-10.0	2 mg/m ³	2 mg/m ³ C	Y	N	N	1310-73-2

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): 1.11
VAPOR PRESSURE (mm Hg): N/D VOC CONTENT (% by weight): N/D
VAPOR DENSITY (AIR = 1): N/D EVAPORATION RATE (WATER = 1): N/D
SOLUBILITY IN WATER: Soluble pH: 12.50 - 13.50
APPEARANCE AND ODOR: Clear, light yellow liquid; mild odor.

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): N/A (TEST METHOD): Closed cup
FLAMMABLE LIMITS IN AIR (VOLUME %) UPPER: N/A LOWER: N/A
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: None.

V - Reactivity Data

STABILITY: Stable**INCOMPATIBILITY:** Strong acids, oxidizers and reducing agents.**CONDITIONS TO AVOID:** None.**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce oxides of carbon.**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:** Moderate to severe irritation, possible corneal injury.**IF ON SKIN:** Moderate to severe irritation, defatting, redness, burns and destruction of tissue, depending on length of exposure.**IF SWALLOWED:** DANGER-Harmful or fatal if swallowed. Severe burns to mucous membranes.**IF INHALED:** Irritation to upper respiratory tract.**EMERGENCY AND FIRST AID PROCEDURES****IF IN EYES:** Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. Obtain medical attention.**IF ON SKIN:** Wash with soap and water. Repeat washing. Remove contaminated clothing and launder separately before reuse. If irritation persists, obtain medical attention.**IF SWALLOWED:** Contact physician or poison control center immediately. Do not induce vomiting. Rinse with copious amounts of water or milk, first. Irrigate the esophagus and dilute stomach contents by slowly giving 1 to 2 glasses of water or milk. Avoid giving alcohol or alcohol related products. Never give anything to an unconscious person.**IF INHALED:** Remove person to fresh air. 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 proper disposal.**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:** Not required**PROTECTIVE GLOVES:** Chemical resistant.**EYE PROTECTION:** Chemical goggles or face shield.**OTHER PROTECTIVE EQUIPMENT:** Eye wash station. Protective clothing**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry place away from acidic material. Keep container tightly closed when not in use. Always add this product to water, never add water to this product.**OTHER PRECAUTIONS:** Keep out of reach of children.

IX - Transportation Information (ground transportation only)

DOT PROPER SHIPPING NAME: Corrosive liquid n.o.s. (sodium hydroxide)**DOT CLASS:** 8**DOT ID NUMBER:** UN1760**DOT PACKING GROUP:** II

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.

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