

MATERIAL SAFETY DATA SHEET

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

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I - Product Identification

Coil Cleaner

PRODUCT CODE: 0101

CHEMICAL FORMULATION: Acid cleaner.

NFPA HAZARD IDENTIFICATION SYSTEM:

HAZARD RATING:

4 - Extreme;

HEALTH: 2

3 - High;

FLAMMABILITY: 1

2 - Moderate;

1 - Slight;

REACTIVITY: 1

0 - Insignificant

II - Hazardous Ingredients

Values reported as TWA unless noted.

SUBSTANCE	APPROX	OSHA	ACGIH	EPA 40 CFR:			CAS #
	%	PEL	TLV	302	355	372	
Ammonium bifluoride	< 2.0	2.5 mg/m ³	2.5 mg/m ³	Y	N	N	1341-49-7
Phosphoric acid	15.0-25.0	1 mg/m ³	1 mg/m ³	Y	N	N	7664-38-2
2-Butoxyethanol	1.0-10.0	25 ppm(skin)	25 ppm(skin)	N	N	Y	111-76-2
Poly (oxyethylene) nonylphenol	< 3.0	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): 212

VAPOR PRESSURE (mm Hg): N/D

VAPOR DENSITY (AIR = 1): N/D

SOLUBILITY IN WATER: Soluble

APPEARANCE AND ODOR: Clear, light blue liquid; characteristic acid odor.

SPECIFIC GRAVITY (WATER = 1): 1.11

VOC CONTENT (% by weight): < 5.00

EVAPORATION RATE (WATER = 1): N/D

pH: < 1.0

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): > 200

(TEST METHOD):

FLAMMABLE LIMITS IN AIR (VOLUME %)

UPPER: N/D

LOWER: N/D

EXTINGUISHING MEDIA: Water, foam, carbon dioxide, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters must be equipped with full protective gear including self-contained breathing apparatus. Avoid breathing smoke or fumes. Move container from fire area if possible.

UNUSUAL FIRE AND EXPLOSION HAZARD: Fire may produce hazardous acid vapors. Contact with metals may produce explosive hydrogen gas accumulations.

V - Reactivity Data

STABILITY: Stable.

INCOMPATIBILITY: Alkaline materials, metals and metal salts.

CONDITIONS TO AVOID: Do not mix with chlorine bleach, ammonia or any other cleaning chemical.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce oxides of carbon, phosphorus, and hydrofluoric acid.

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: Corrosive-Severe irritation, burns, destruction of tissue.

IF ON SKIN: Corrosive-Severe irritation, burns, destruction of tissue.

IF SWALLOWED: Severe burns to mucous membranes, destruction of tissue, DANGER – may be fatal if swallowed.

IF INHALED: Severe irritation of respiratory tract, pulmonary edema.

EMERGENCY AND FIRST AID PROCEDURES

IF IN EYES: Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. Continue flushing until medical assistance arrives.

IF ON SKIN: Remove contaminated clothing. Flush with plenty of cool water for at least 15 minutes and cover exposed area with moist baking soda. Obtain medical assistance.

IF SWALLOWED: Contact physician or poison control center immediately. Do not induce vomiting. Give large quantities of water followed with milk of magnesia, beaten egg whites, or vegetable oil.

IF INHALED: Remove person to fresh air and call physician if irritation persists.

VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area and evacuate unprotected persons. Extinguish all sources of ignition. Contain spill and place into drums for proper disposal. Neutralize remaining area with baking soda, soda ash or lime.

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: Goggles and/or face shield.

OTHER PROTECTIVE EQUIPMENT: Emergency shower and eye wash station. Protective clothing.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Product is corrosive. Store away from heat, sparks, open flame, alkaline materials and reactive chemicals. Do not mix with any other cleaning chemicals. Keep container tightly closed when not in use.

OTHER PRECAUTIONS: Keep out of reach of children.

IX - Transportation Information (ground transportation only)

DOT PROPER SHIPPING NAME: Compounds, cleaning liquid (phosphoric acid).

DOT CLASS: 8

DOT ID NUMBER: 1760

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.

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