

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

Heavy Duty Penetrating Oil

PRODUCT CODE: 0302

CHEMICAL FORMULATION: Solvent based lubricant.

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 2 FLAMMABILITY: 1 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 PEL	ACGIH TLV	EPA 40 CFR:			CAS #
				302	355	372	
Trichloroethylene	30.0-40.0	50 ppm	50 ppm	Y	N	Y	79-01-6
Hydrotreated Base Oil	45.0-55.0	5 mg/m ³ (as oil mist)	N/A	N	N	N	64742-52-5

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/A SPECIFIC GRAVITY (WATER = 1): 1.04
VAPOR PRESSURE (mm Hg): N/D VOC CONTENT (% by weight): 34
VAPOR DENSITY (AIR = 1): N/D EVAPORATION RATE (WATER = 1): > 1.0
SOLUBILITY IN WATER: Insoluble pH: N/A
APPEARANCE AND ODOR: Clear, dark gold liquid, characteristic chlorinated solvent odor.

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): > 200 (TEST METHOD): Closed cup
FLAMMABLE LIMITS IN AIR (VOLUME %) UPPER: N/A LOWER: N/A
EXTINGUISHING MEDIA: Foam, carbon dioxide, dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES: Firefighters must use full protective gear including self-contained breathing apparatus.
Cool fire exposed containers with water fog
UNUSUAL FIRE AND EXPLOSION HAZARD: Use water spray to cool fire-exposed containers. Solvent vapors may cause flashback.

V - Reactivity Data

STABILITY: Stable**INCOMPATIBILITY:** Oxidizers, strong acids, alkalis and aluminum.**CONDITIONS TO AVOID:** None**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce hydrogen chloride, traces of phosgene and 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:**
Trichloroethylene (IARC 2A).**EFFECTS OF OVEREXPOSURE****IF IN EYES:** Moderate to severe irritation.**IF ON SKIN:** Redness, dryness, irritation, dermatitis with prolonged or repeated exposure.**IF SWALLOWED:** Gastrointestinal irritation, nausea, cramps, vomiting. May be an aspiration hazard.**IF INHALED:** Irritation to upper respiratory tract, CNS depression, cardiac sensitization.**EMERGENCY AND FIRST AID PROCEDURES****IF IN EYES:** Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical attention.**IF ON SKIN:** Wash with soap and water. Remove all 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. Never give anything by mouth to an unconscious person.**IF INHALED:** Remove person to fresh air. If breathing has stopped, administer artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention, if irritation persists.

VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area and remove all sources of ignition. 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 the manufacturer's recommendations.**VENTILATION****LOCAL:** Recommended**MECHANICAL:** Not required**PROTECTIVE GLOVES:** Chemical resistant.**EYE PROTECTION:** Chemical goggles or chemical goggles.**OTHER PROTECTIVE EQUIPMENT:** Apron, eye wash station.**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry place away from heat or open flame. Keep container tightly closed when not in use. Wash thoroughly after handling.**OTHER PRECAUTIONS:** Keep out of reach of children.

IX - Transportation Information (ground transportation only)

DOT PROPER SHIPPING NAME: Trichloroethylene solution**DOT CLASS:** 6.1**DOT ID NUMBER:** UN1710**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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