

MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174

IDENTITY AND MANUFACTURER'S INFORMATION

NFPA Rating: Health-2; Flammability-0; Reactivity-0; Special---		HMIS Rating: Health-2; Flammability-0; Reactivity-0; Personal Protection-B	
Manufactured For: Hillyard Industries, Inc. Address: 302 N. 4 th Street Address: St. Joseph, MO 64501		DOT Hazard Classification: ORM-D Identity (trade name as used on label): I-Force Penetrating Lubricant (# HIL0111054)	
Phone: (816)-233-1321 ext. 8285 or http://www.hillyard.com		MSDS Number: A00391 Revision- 15	
EMERGENCY RESPONSE NUMBER: Chemtrec 1-800-424-9300		Date Prepared: 04/16/09 Prepared By: IB	
NOTICE: JUDGEMENT BASED ON INDIRECT TEST DATA		Information Calls: (770)422-2071	

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	CAS Number	SARA III LIST	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
PERCHLOROETHYLENE	127-18-4	Yes	25	25	a,b
TRICHLOROETHYLENE	79-01-6	Yes	50	50	b
PETROLEUM DISTILLATE	64742-54-7	Yes	5mg/M3	5mg/M3	d
CALCIUM PETROLEUM SULFONATE	61789-86-4	No	NE	NE	d
CARBON DIOXIDE	124-38-9	No	5000	5000	d
WARNING: This product contains a chemical or chemicals known to the State of California to cause cancer.					

SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: N/A	Specific Gravity (H ₂ O=1): Concentrate Only = 1.42
Vapor Pressure: PSIG @ 70°F (Aerosols): 85-100	Vapor Pressure (Non-Aerosols)(mm Hg and Temperature): N/A
Vapor Density (Air = 1): N/E	Evaporation Rate (n-butyl acetate= 1): 2.1 (concentrate only)
Solubility in Water: Insoluble	Water Reactive: No
Appearance and Odor: Light brown color with chlorinated solvent odor. Sprays as a narrow stream, wet mist.	

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA FLAME PROJECTION TEST (aerosols) : CPSC: NOT CATEGORIZED AS FLAMMABLE	Auto Ignition Temperature N/E	Flammability Limits in Air by % in Volume: % LEL: N/E % UEL: N/E
FLASH POINT AND METHOD USED (non-aerosols): N/A	EXTINGUISHER MEDIA: Foam, dry chemical, carbon dioxide.	
SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus.		
Unusual Fire & Explosion Hazards: Do not expose aerosols to temperatures above 120°F or the container may rupture.		

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY [X] STABLE [] UNSTABLE	HAZARDOUS POLYMERIZATION [] WILL [X] WILL NOT OCCUR
Incompatibility (Mat. to avoid): Reactive metals, aluminum, magnesium, strong oxidizing agents.	Conditions to Avoid: Open flame, welding arcs, heat.
Hazardous Decomposition Products: CO ₂ , CO, HCl, unidentified carbon oxides, small amounts of phosgene and chlorine.	

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: [X] INHALATION [X] INGESTION [X] SKIN ABSORPTION [X] EYE [] NOT HAZARDOUS	
ACUTE EFFECTS:	
Inhalation: Excessive inhalation of vapors can be harmful and may cause headache, dizziness, asphyxia, anesthetic effects and possible unconsciousness.	
Eye Contact: Irritation	Skin Contact: Irritation due to defatting of skin.
Ingestion: Possible chemical pneumonitis if aspirated into lungs. Nausea.	
CHRONIC EFFECTS: (Effects due to excessive exposure to the raw materials of this mixture) May cause liver abnormalities, kidney, spleen, lung or brain damage, cardiac abnormalities. Perchloroethylene has been shown to increase the rate of spontaneously occurring malignant tumors in certain laboratory rats and mice.	
Medical Conditions Generally Aggravated by Exposure: May aggravate existing eye, skin, or upper respiratory conditions.	

EMERGENCY FIRST AID PROCEDURES

Eye Contact: Flush with water for 15 minutes. If irritated, seek medical attention.
Skin Contact: Wash with soap and water. If irritated, seek medical attention.
Inhalation: Remove to fresh air. Resuscitate if necessary. Get medical attention.
Ingestion: DO NOT INDUCE VOMITING. Drink two large glasses of water. Get immediate medical attention.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (specify type): If vapor concentration exceeds TLV, use respirator approved by NIOSH for chlorinated solvents and organic vapor mist.	
Protective Gloves: Neoprene gloves recommended.	Eye Protection: Safety glasses recommended.
Ventilation Requirements: Adequate ventilation to keep vapor concentration below TLV.	
Other Protective Clothing & Equipment: None	
Hygienic Work Practices: Wash with soap and water before handling food. Remove contaminated clothing.	

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken If Material Is Spilled Or Released: Absorb with suitable medium. Incinerate or landfill according to local, state or Federal regulations. Allow to evaporate if small spill. DO NOT FLUSH TO SEWER.
Waste Disposal Methods: Aerosol cans when vented to atmospheric pressure through normal use, pose no disposal hazard.
Precautions To Be Taken In Handling & Storage: Do not puncture or incinerate containers. Do not store at temperatures above 120°F.
Other Precautions &/or Special Hazards: KEEP OUT OF REACH OF CHILDREN. Product contains less than 0.3% zinc salt. Avoid food contamination. Avoid inhalation of vapors.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind.

** Chemical Listed as Carcinogen or Potential Carcinogen. [a] NTP [b] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only