

12/29/99

MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT IDENTIFICATION

Chemical Name & Symbol: N/A**Trade Names and Synonyms:** Invader**Chemical Family:** Hydrocarbons**Classification:** Penetrant/lubricant**Product No:** CH011**Suppliers Name:** Lonestar Maintenance Chemicals **Emergency Phone:** 1-800-721-2448**Address:** P.O. Box 844, Buna TX 77612**HMIS:** **Reactivity:** 0 **Flammability:** 1 **Health:** 2 **Personal Protect:** N/A

SECTION 2 - INGREDIENTS

Chemical Name	CAS #	TLV	%	LD/50	Route	Species	LC/50	Route	Species
Perchloroethylene	127-18-4	50 ppm	60-100	2629 mm/kg	Oral	Rat	5200 ppm (4 hr)	Inhal	Mouse
Petroleum Oil	8002-05-9	5mg/m3	7-13	NA	NA	NA	NA	NA	NA
Carbon Dioxide	124-38-9	5000 ppm	1-5	NA	NA	NA	NA	NA	NA

SECTION 3 – PHYSICAL DATA

Boiling Point: (deg C) (conc)	121-200	Specific Gravity (liquid and aerosol)	1.38-1.42
Vapor Pressure (PSIG)	80-90 @20 C	Vapor Density (Air = 1)	>1 (by weight)
Physical State:	Aerosol	Solubility in Water:	Negligible
Evaporation Rate (Butyl Acetate =1)	>1	Appearance & Odor:	Clear liquid, ethereal odor
Aerosol Percent Voc (W/W)	1	Aerosol Percent Volatile (by weight)	89-90
pH	NA	Freezing Point: (C)	NA
Coefficient of Water/Oil	NA		

SECTION 4 – FIRE AND EXPLOSION DATA

Aerosol Flame Projection:

Classified as: 0 cm. **Flashback:** None. **Flammability:** Not flammable (as per Canadian aerosol regulations). **If yes under which conditions:** Excessive heat, sparks and open flame. **Extinguishing Media:** CO₂, dry chemical, foam. **Special Procedures:** Water from fogging nozzles may be used to cool closed containers to prevent build-up if exposed to extreme temperatures. Full protective equipment including self-contained breathing apparatus should be worn in a fire involving this material. **Flash Point (C), Tag Closed-Cup (Concentrate):** N/A. **Auto Ignition Temperature (C):** N/A. **Explosive Limits:** LEL: N/A UEL: N/A. **Hazardous Combustion Products:** Possible phosgene over 250 C, Chlorine gas, Hydrochloric acid. Hydrocarbon fumes and smoke. Carbon monoxide where combustion is incomplete. **Explosion Data Sensitivity to Static:** N/A **Discharge Sensitivity to Impact:** N/A.

SECTION 5 – HEALTH HAZARDS

Routes of Entry:

Skin Contact: Can cause severe irritation, drying, cracking, scaling, leading possible to allergic dermatitis. **Skin Absorption:** Only very slowly upon prolonged or repeated contact. **Eye Contact:** Contains materials that are moderately irritating to the eyes. **Inhalation:** High vapor concentration attainable at elevated temperatures may produce dizziness, headache, and respiratory irritation. Propellant is a simple asphyxiate. **Ingestion:** Causes severe irritation and inflammation of mouth, throat and stomach. Severe stomach pains will follow with the possible loss of consciousness. May cause headache, nausea, vomiting, and weakness. **Effects of Acute Exposure:** Dizziness, Nausea. Irritation to skin and eyes. **Effects of Chronic Exposure:** solvents may cause defatting dermatitis. **Exposure limit of material:** See Section II. **Irritancy of Material:** Skin/Eye irritant. **Sensitizing capability of material:** Unknown. **Carcinogenicity of Material:** Perchloroethylene has been listed as a potential carcinogen by IARC. **Reproductive/Teratogenicity/Mutagenicity Effects:** No information is available and no adverse effects are anticipated. **Synergistic Materials:** None Known.

Emergency First Aid procedures:

Eye: flush immediately with plenty of water for at least 15 minutes and get medical attention. **Skin:** wash thoroughly with soap and water. **Inhalation:** remove to fresh air. **Ingestion:** do not induce vomiting, get medical attention.

SECTION 6 – PRECAUTIONS AND SAFE HANDLING

Steps to be taken in case material is spilled or leaked: remove all sources of ignition. Use an inert absorbent material, non-sparking tools. Avoid breathing fumes. Ventilate area. Prevent from entering a watercourse. **Waste Disposal Method:** Do not puncture or incinerate containers, even when empty. Dispose of in accordance with local, provincial and federal regulations. **Precautions to be taken in handling and storing:** Store in a cool, well-ventilated area, not to exceed 50 deg C. Keep away from heat, sparks, and open flames. **Special Shipping Instructions:** See Section 1-TDG Classification

SECTION 7 – REACTIVITY DATA

Chemical Stability: Yes – under normal conditions
No, which conditions? N/A

Compatibility with Other Substances: No, which ones? Strong oxidizing agents

Decomposition: Possible Phosgene over 250 deg C, Chlorine gas, Hydrochloric acid. Hydrocarbon fumes and smoke. Carbon monoxide where combustion is incomplete.

Reactivity Conditions: N/A

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SECTION 8 – SPECIAL PROTECTION INFORMATION

Read and understand the manufacturer’s instructions and the precautionary label on this product.

Respiratory Protection:	If used indoors on a continuous basis, use of a cartridge type respirator. (NIOSH.MSHATC 23C or equivalent) is recommended.	Engineering Controls:	Ventilation- Local (Mechanical if used indoors on a continuous basis)	Protective Gloves:	Wear chemical resistant gloves. Not
Eyes:	Safety glasses	Other Protective Equipment:	Not required	Footwear	normally required.

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