

# MATERIAL SAFETY DATA SHEET

MISTIC METAL MOVER, INC.  
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February 1, 2005  
EMERGENCY TELEPHONE NUMBER  
- 24 HOURS -  
1-800-535-5053

## SECTION 1 - PRODUCT INFORMATION

PRODUCT NAME: Mistic Metal Mover Original Reformulated

FORMULA: Proprietary

## SECTION 2 - HAZARDOUS INGREDIENTS

INGREDIENT	CAS#	%VOL	TLV/PEL	STEL	HAZARD
Trichloroethylene	79-01-6	25-45	50 ppm	200 ppm	Skin, Eyes, Inhalation

ACGIH/OSHA short term exposure limit (STEL) for Trichloroethylene is 50 ppm, 8-Hour TWA. NIOSH recommends a 100 ppm ceiling limit. Trichloroethylene is listed in Group 2A as a potential carcinogen by IARC, but is not listed by NTP or OSHA. Trichloroethylene is subject to the reporting requirements of Section 313 of Sara Title III.

REFERENCES: 29CFR 1910.1000. ACGIH "Threshold Limit Values for Chemicals in the Workplace", National Toxicology Program Annual Report, International Agency for Research on Cancer Monographs, and 40CFR Part 372. All components of this product are in compliance with TSCA.

### TRANSPORTATION:

Containers of this product less than 25 Gallons are exempt.

Spills greater than 285 lbs. must be reported.

Hazard Class of containers less than 25 Gal. - NONE

## SECTION 3 - PHYSICAL DATA

BOILING POINT: 86-88°C

VAPOR PRESSURE (@68°F): 20 mm Hg

SPECIFIC GRAVITY: 1.01

% VOLATILE (EPA METHOD 24): 100

SOLUBILITY: Insoluble

VAPOR DENSITY (AIR=1): 4.5

APPEARANCE AND ODOR: Liquid, organic solvent odor

## SECTION 4 - FIRE AND EXPLOSION INFORMATION

FLASH POINT (SETAFLASH): >300

FLAMMABLE LIMITS: LEL: 7.8 UEL: 52.0

EXTINGUISHING METHODS: Regular Foam, Carbon Dioxide, Water Fog

FIRE FIGHTING PROCEDURES: May form toxic materials including: carbon mono/dioxides, hydrogen chloride, phosgene, various hydrocarbons, chlorine, etc. Wear self-contained breathing apparatus with a full face piece operating in the positive pressure demand mode when fighting fires.

SPECIAL FIRE & EXPLOSION HAZARDS: Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Vapors concentrated in a confined/poorly ventilated area can be ignited upon contact with a high energy spark, flame or high intensity source of heat. Vapors are heavier than air and will collect in low areas.

HMIS CODES: Health - 2, Flammability - 0, Reactivity - 0, Personal Protection - B

NFPA CODES: Health - 2, Flammability - 0, Reactivity - 0

## SECTION 5 - HEALTH HAZARD DATA

**EYES:** Liquid may cause pain. May cause slight transient (temporary) irritation with slight transient corneal injury. Vapors may irritate eyes causing redness, tearing, or blurred vision. Contact lenses must not be worn when possibility exists for eye contact due to spraying liquid or airborne particles.

**SKIN:** Prolonged or repeated contact can cause moderate irritation, defatting and dermatitis.

**BREATHING:** Excessive inhalation of vapors can cause nasal and respiratory irritation, central nervous system effects including dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.

**CONCENTRATIONS** of Trichloroethylene in the 500 to 1000 ppm range may produce minimal anesthetic or narcotic effects. Progressively higher concentrations over 1000 ppm can cause dizziness or drunkenness. Concentrations as low as 10,000 can cause unconsciousness and even death. These high levels may also cause blood pressure depression, cardiac sensitization and ventricular arrhythmias. In confined or poorly ventilated areas, vapors which readily accumulate can cause unconsciousness and death. LC50 inhalation (rats) is 8000 ppm/4 hour.

**STUDIES IN LAB** animals have shown Trichloroethylene in aerosol form to be more acutely toxic than Trichloroethylene vapor.

**SWALLOWING:** Single dose oral toxicity of Trichloroethylene is low. The LD50 ingestion (rats) is 4900 - 7000 MG/KG. The 96 hour LC50 for Mysid Shrimp is 14 MG/L - slightly toxic. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal. If aspirated, may be rapidly absorbed through the lungs and result in injury to other body systems.

## FIRST AID/EMERGENCY PROCEDURES

**INHALATION:** Remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet and get medical attention. Do not give stimulants. Epinephrine or ephedrine may adversely affect the heart with fatal results.

**SKIN CONTACT:** Wash thoroughly with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use.

**EYES:** Flush with copious amounts of water. Get medical attention.

**INGESTION:** Do not induce vomiting. Immediately drink two glasses of water. Get medical attention. Never give anything by mouth to an unconscious person. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.

**NOTE TO PHYSICIAN:** Because of rapid absorption may occur through the lungs if aspirated and cause systemic effects, the decision to induce vomiting or not should be made by attending physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity of Trichloroethylene when considering emptying the stomach. Exposure may increase "Myocardial Irritability". Do not administer sympathomimetic drugs unless absolutely necessary. No specific antidote.

**PRIMARY ENTRY ROUTE(S):** Inhalation, skin absorption, skin contact.

**CHRONIC HEALTH EFFECTS:** Overexposure to trichloroethylene has been found to cause the following effects in laboratory animals: kidney and lung damage.

**OVEREXPOSURE** to Trichloroethylene has been suggested as a cause of the following effects in humans: cardiac abnormality, liver abnormalities, kidney damage. While there are studies in which tumors were induced in mice, there is no documented evidence that exposure to trichloroethylene produces cancer in humans.

## SECTION 6 - REACTIVITY DATA

**HAZARDOUS POLYMERIZATION:** Cannot Occur

**STABILITY:** Liquid oxygen or other strong oxidants may form explosive mixtures with Trichloroethylene.

**INCOMPATIBILITY:** Avoid contact with: water, reactive metals such as aluminum and magnesium, open flame, welding arcs, resistance heaters, etc. which can result in thermal decomposition - releasing hydrogen chloride and small amounts of phosgene and chlorine, strong oxidizing agents, and strong alkalies.

## SECTION 7 - SPILL OR LEAK PROCEDURE

**PROCEDURES FOR SPILL/LEAK:** Trichloroethylene vapors are heavier than air and will collect in low areas. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks, etc.)

**SMALL SPILL:** Absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material and transfer to safe evaporation area.

**LARGE SPILL:** Persons not wearing protective equipment should be excluded from area of spill until cleanup has been completed. Stop spill at source. Dike area of spill to prevent spreading. Pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

**PREVENT RUN-OFF TO:** Sewers, streams or other bodies of water. Notify proper authorities, as required, that a spill has occurred.

**WASTE MANAGEMENT:** Dispose of in accordance with all local, state, and federal regulations.

## SECTION 8 - PROTECTIVE EQUIPMENT TO BE USED

**RESPIRATORY PROTECTION:** If workplace exposure limit(s) of product is exceeded, a NIOSH/MSHA approved air supplied respirator is advised in the absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

**VENTILATION:** Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain minimum exposure.

**EYE PROTECTION:** Chemical splash proof goggles and full face shield are advised for operations where eye or face contact can occur.

**GLOVES:** Wear impervious gloves such as polyvinyl alcohol, vitron(r), silver shield(r).

**OTHER PROTECTIVE EQUIPMENT:** To prevent repeated or prolonged skin contact, wear impervious clothing and boots. Consult your supervisor.

## SECTION 9 - SPECIAL PRECAUTIONS OR OTHER COMMENTS

**ALUMINUM** equipment should not be used for storage and/or transfer, e.g. pumps, mixers, fittings, storage tanks, etc. Contact with aluminum parts in a pressurized fluid system may cause a violent reaction.

**USE ONLY WITH** adequate ventilation. Ventilation must be sufficient to limit employee exposure to trichloroethylene below permissible limits. Observance of lower limits is advisable.

**TO AVOID** skin contact and ingestion, wash hands and face well before eating or smoking. Do not permit food in work area. Avoid breathing mists if generated. Store at room temperature. Reseal container when not in use.

**CONTAINERS** of this material may be hazardous when emptied, since emptied containers retain product residues (vapor and/or liquid).

**SARA TITLE III - A) 311/312 Categories - Acute and Chronic, B) Listed in section 313 under Trichloroethylene, C) Not listed as an "Extremely Hazardous Substance" in Section 302.**

**CERCLA** - Listed in Table 302.4 of 40 CFR PART 302 as a hazardous substance with a reportable quantity of 100 pounds. Releases to air, land or water which exceed the reportable quantity must be reported to the national response center, (800) 424-8802.

**RCRA** - Waste trichloroethylene and contaminated soils/materials from spill cleanup and U228 Hazardous waste as per 40 CFR 261.33 and must be disposed of accordingly under RCRA. See 40 CFR 261.33 and 261.7(B)(3) for cleaning requirements for empty containers.

**CALIFORNIA PROPOSITION 65** - Trichloroethylene is a chemical known to the State of California to cause cancer.

**NEW JERSEY RIGHT-TO-KNOW** - Also contains Ethylene Oxide (CAS#106-88-7)

**CANADIAN WHMIS** - A) Sensitization to product: None Known, B) Reproductive Toxicity: None Known, C) Odor Threshold: Not Known, D) Product Use: Lubricant/Degreasing, E) Requires Poison Symbol (Class D.1).

*As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.*