

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name: Ester 4A Tank

Product Code: 131408, 131397

Product Type: Aerosol

Product Use: Mold Release

Manufacturer: IMS Company
Address: 10373 Stafford Road
Chagrin Falls, OH 44023-5296
WEB www.imscompany.com

Emergency Phone 800-424-9300
Prepared by Product Safety Advisor
Prepared/Revised September 23, 2011
E-mail sales@imscompany.com

NOTE: The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. We provide this information as guidance for providing personal protection to your employees. The user has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. The user must meet all applicable safety and health standards. We provide this information as guidance for providing personal protection to your employees.

2. Composition / Information on Ingredients

Ingredients	CAS #	Percent	Exposure Limits
Trichloroethylene	79-01-6	45-650%	OSHA (TWA) 100 ppm ACGIH (TWA) 25 ppm
1,1,1,2-Tetrafluoroethane (134a)	811-97-2	30-50 %	OSHA (TLV) 1000 ppm
Licethin	8029-76-3	.05-10	NE
Carbon Dioxide	124-38-9	.1-10 %	OSHA (PEL) 5000 ppm ACGIH (TLV_TWA) 5000 ppm

3. Hazards Identification

CAUTION! CONTENTS UNDER PRESSURE
DANGER: POISON.

Odor/Appearance: Clear mist as dispensed from tank.

Potential health effects

Routes of exposure: Skin, eyes, inhalation, ingestion.

Eye Contact:

May cause immediate or delayed irritation. Irritation may show up as redness and/or swelling.
May cause corneal damage.

Skin Contact:

Repeated or prolonged contact with skin may produce redness, irritation and/or dryness. May cause or aggravate dermatitis or other existing skin condition.

Inhalation:

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.). Alcohol consumed before or after exposure may worsen harmful effects

Ingestion:

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury..

Signs or Overexposure:

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), weakness, lack of coordination, irregular heartbeat, and death

Target Organs:

Persons exposed to trichloroethylene may become intolerant to alcohol with small quantities causing drunkenness and skin blotches., Studies on trichloroethylene-exposed workers indicate that overexposure to this chemical may result in involuntary eye movement, tremors, sleep disturbances, symptoms of central nervous system(CNS) depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), and other CNS effects., Brief or prolonged exposure to trichloroethylene and its decomposition products (e.g. dichloroacetylene) has been associated with cranial neuropathy (characterized by facial numbness), although it isn't clear which agent is responsible for the effect., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals:, mild, reversible liver effects, effects on hearing, kidney damage.

Carcinogenicity:

Exposure to trichloroethylene has been associated with slight increases in certain types of cancer, including liver, biliary tract, and non-Hodgkin's lymphoma in some studies. However, other studies have not found an increased cancer incidence in groups exposed to trichloroethylene. Some studies with trichloroethylene in laboratory animals have produced cancer of the liver and/or lung, while others have not. Trichloroethylene is considered to be a probable human carcinogen by the International Agency for Research on Cancer (IARC) and is listed as a carcinogen by the National Toxicology Program (NTP)

4. First Aid Measures

Eye Contact:

Flush with warm water for 15 minutes. Seek medical attention.

Skin Contact:

Wash with soap and water. Remove any contaminated clothing and launder before reusing. If irritation persists, seek medical attention.

Inhalation:

Remove exposed individual to fresh air, protecting yourself. Restore breathing if necessary. Contact a physician.

Ingestion:

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

5. Fire Fighting Measures

Flash Point: None

Flammable limits in air, % by volume:

Upper: No Information

Lower: No Information

Extinguishing Media:

Dry chemical, carbon dioxide, halon, or foam is recommended. Water spray may be used to cool containers or structures. Halon may decompose into toxic materials and carbon dioxide will displace oxygen, take proper precautions when using these materials.

Unusual Fire & Explosion Hazards:

This material may be ignited by extreme heat, sparks, flames or other ignition sources (static electricity). Vapors are heavier than air and will collect in low areas (sewers) or travel considerable distances. If containers are not cooled in a fire, they may rupture and ignite.

Special Fire Fighting Procedures:

At elevated temperatures (over 130F) aerosol container may burst, vent or rupture; use equipment or shielding to protect personnel. Cooling exposed containers with streams of water may be helpful. Emergency responders should wear self-contained breathing apparatus. Wear other protective gear as conditions warrant. Keep unauthorized people out and try to contain spills or leaks if it can be done safely. Material will float on water, avoid spreading the fire.

6. Accidental Release Measures

Spill or Leak Instructions

Contain spill with dikes of soil or nonflammable absorbent to minimize contaminated area. Avoid run-off into storm sewers and ditches leading to waterways. If required, notify state and local authorities. Place leaking containers in well-ventilated area. Clean up small spills by using a nonflammable absorbent or flushing sparingly with water. Contain larger spills with nonflammable diking or absorbent. Clean up by vacuuming or sweeping.

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Assess the spill situation, as the spill may not evolve large amounts of hazardous airborne contaminants in many outdoor spill situations. It may be advisable in some cases to simply monitor the situation until spilled product is removed.

7. Handling and Storage

Handling:

Store below 120°F in cool, dry area, out of direct sunlight and away from strong oxidizers. Do not puncture or burst. Use in accordance with good work place practices. Use with adequate ventilation. Keep containers closed when not in use. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapor. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Decontaminate soiled clothing thoroughly before re-use. Destroy contaminated leather clothing.

Empty containers may contain residues from the product. Treat empty containers with the same precautions as the material last contained. Do not cut, weld or apply heat to empty containers Do not incinerate

Storage:

Store in a cool, dry area, away form heat or direct sunlight. Keep containers closed when not in use. Do not store with incompatible materials

8. Exposure Controls / Personal Protection

Protective Equipment:

Use synthetic gloves if necessary to prevent excessive skin contact. Do not wear contacts and always use ANSI approved safety glasses or splash shield.

Engineering Controls:

General or dilution ventilation is frequently sufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Use a NIOSH approved respirator if ventilation is not adequate to maintain exposures below TLV levels.

Respiratory Protection:

Use adequate ventilation to maintain exposure limits. If the exposure limits of the products or any of its components is exceeded, an approved organic vapor mask should be used (consult your safety equipment supplier). Above Exposure limits, an approved self-contained breathing apparatus or airline respirator with full face-piece is required

Other Suggested Equipment:

Eye wash station and emergency showers should be available. Spill containment equipment should be available.

Discretion Advised:

We. take no responsibility for determining what measures are required for personal protection in any specific application. The general information should be used with discretion.

Exposure guidelines:

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9. Physical and Chemical Properties

Boiling Point: NA

Vapor Density: >1(Air=1)

Odor/Appearance: Cleat mist as dispensed from aerosol can.

Odor of chloroform

Evaporation Rate: Ether = 1 Slower

Specific Gravity: >1

Water Solubility: Negligible

15. Regulatory Information

Environmental Regulations

SARA 302/304:

None

SARA 311/312:

Immediate (x) Delayed () Fire (x) Reactive () Sudden Release of Pressure (x)

Section 313

This product contains:

Trichloroethylene ` 76-01-6 54%

CELCRA

Trichloroethylene ` 76-01-6 54%

California Prop. 65

WARNING: This product contains a chemical known in the State of California to cause cancer.
TRICHLOROETHYLENE

All the chemicals used in this product are TSCA listed.
Check with your local regulators to be sure all local regulations are met.

16. Other Information

Hazard ratings This information is intended solely for the use of individuals trained in the NFPA and/or HMIS systems.

HMIS: Health: 2 Flammability: 2 Reactivity: 0

RATING: 4-EXTREME 3-HIGH 2-MODERATE 1-SLIGHT 0-INSIGNIFICANT

Note:

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