



TULSTAR PRODUCTS, INC.

5510 SOUTH LEWIS AVENUE • TULSA, OK 74105 • (918) 749-9060 • FAX (918) 747-1444
TULSTAR@TULSTAR.COM • WWW.TULSTAR.COM

MATERIAL SAFETY DATA SHEET

COMPANY INFORMATION

Company Name: **TULSTAR PRODUCTS, INC.**
5510 S. Lewis Ave
Tulsa, OK 74105
Phone Number: (918) 749-9060
Fax Number: (918) 747-1444
Email Address: tulstar@tulstar.com
Emergency Number: CHEMTREC 800-424-9300 (24 hours)

IDENTIFICATION

Product Name: HCFC 141b & Methanol
Product Type: Solvent Cleaner
Chemical Name: 1,1-Dichloro-1-1fluoroethane & Methanol
Synonyms: 141b & Methanol Solvent Cleaner

COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	OSHA PEL	AGCIH TLV	Vapor Pressure @ 25°C	LEL	UEL	Flash Point °F	Weight
HCFC 141b ♠	1717-00-6	N/A	N/A	10 psia	7.4	15.5	None	85-90%
Methanol	67-56-1	200 ppm	200 ppm	96 mmHg	6.0	36.0	52	5-10%
CO ₂ ♦	124-38-9	5000 ppm	N/A	1 atm.	None	None	None	1-5%
134a ♣	811-97-2	N/A	N/A	96 psia			Non Flammable	

- ♠ 1,1-Dichloro-1-fluoro-ethane
- ♦ Carbon Dioxide
- ♣ 1,1,1,2-Tetrafluoro-ethane

FIRST AID MEASURES

Routes of Exposure: Inhalation, eyes, skin, ingestion.

Effects:

Inhalation: Overexposure to vapor may cause dizziness, loss of concentration and irritation. With high exposure levels, effects can include central nervous system, depression (intoxication) and cardiac arrhythmia. Product vapors displace air and can cause suffocation especially in confined spaces. Intentional misuse by deliberately concentrating and inhaling the contents of the can may be harmful or fatal.

Eyes: Contact with liquid or mist may cause irritation. Vapors may irritate eyes.

Skin: Prolonged contact may cause irritation, defatting of skin.

Ingestion: Swallowing even small amounts of methanol can cause blindness and death; other effects may be nausea, headache, abdominal pain, vomiting and visual disturbances ranging from blurred vision to light sensitivity. Inhalation of high airborne concentration can also irritate mucous membranes, cause headaches, sleepiness, nausea, confusion, loss of consciousness, digestive and visual disturbances and death. Aspiration may cause rapid absorption through the lungs, which may result in systemic effects.

First Aid:

Inhalation: Remove to fresh air. If not breathing, give mouth-to-mouth. If breathing is difficult, give oxygen. Do not give epinephrine or similar drugs. Call a physician.
Eye: Flush with water for at least 15 minutes. Get medical assistance if irritation persists.
Skin: Wash off in flowing water or shower. Remove contaminated clothing and wash before reuse.
Ingestion: Do not induce vomiting. Call a physician immediately.

FIRE FIGHTING MEASURES

Common extinguishing Methods: Water fog, dry chemical, carbon dioxide.
Special Hazards: Although aerosols are classified as nonflammable under ASTM D 3065-77 Flame Protection Test, this product should not be used or stored near any open flames or ignition sources. Contents under pressure. Self-pressurized aerosol containers. Keep temperature of containers below 120°F to prevent bursting. Hazardous decomposition products.
Special Fire Fighting Procedures: Water may be used to cool closed containers to prevent pressure build-up and possible bursting when exposed to high temperatures. Firemen should wear self-pressure build-up and possible bursting when exposed to high temperatures. Firemen should wear self-contained, positive pressure, respiratory equipment.

ACCIDENTIAL RELEASE MEASURES

Small Spills: Remove ignition sources. Mop up, wipe up, or soak up immediately. Use proper protective equipment.
Large Spills: Evacuate area. Remove ignition sources. Contain liquid; transfer to closed containers; keep out of water supplies.

HANDLING & STORAGE

Handling & Storage: Do not store above 110°F. Do not use or store near any open flames or ignition sources.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: NIOSH or Bureau of Mines approved organic vapor-type respirators is required in absence of proper environmental control.
Ventilation: Local Exhaust- to keep below TLV
Mechanical- to keep below TLV
Special- None
Other- None
Hand Protection: Protective gloves, chemical resistant. Recommended- Polyvinylalcohol.
Eye Protection: Wear protective goggles for all industrial operations. Chemical proof goggles/face shield, if risk of splashing.
Other Precautions: None reasonably foreseeable.

PHYSICAL & CHEMICAL PROPERTIES

Appearance: Concentrate: Clear liquid, irritating odor at high concentrations
Propellant: Colorless, odorless gas
Finished Package: Pressurized containers
Boiling Point: Concentrate Range: 75-150°F
Vapor Density: >1 (air = 1)
Specific Gravity: Concentrate: 1.2 (H₂O = 1)
Solubility in Water: Negligible
Volatile by Weight: 100 %
Volatile Organic Comps: 5 %
Reactivity in Water: None

STABILITY & REACTIVITY

Stability: Stable
Conditions to Avoid: Avoid any excessive heat, ignition sources, open flames, or other high temperatures which include thermal decomposition.
Material to Avoid: Chemically active metals, oxidizing agents. Sodium, potassium, calcium, etc. Alkali or alkaline earth metals. Powdered aluminum, zinc, magnesium, beryllium, etc.
Hazardous Decomposition Products: Hydrochloric acid, hydrogen chloride, small amounts of phosgene and chlorine.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Not Applicable.

DISPOSAL CONSIDERATIONS

Waste Treatment: Dispose in accordance with federal, state, and local regulations. Do not incinerate closed or empty containers.

REGULATORY INFORMATION

Subject to Section 313 of SARA Title III: Yes
HCFC 141b \Rightarrow 90 % by weight; Methanol \Rightarrow 5 %
All chemical components are listed in the TSCA inventory.
Chemical listed as carcinogen or potential carcinogen.
National Toxicology Program: No
I.A.R.C. Monographs: No
OSHA: No
HMIS Ratings:

Health-	2	Minimal Hazard-	0
Flammability-	1	Slight Hazard-	1
Reactivity-	0	Moderate Hazard-	2
Personal Protection-	B	Serious Hazard-	3
Severe Hazard-	4	Gloves, Safety Glasses-	B

TRANSPORTATION INFORMATION

Ship: Domestic Ground
Shipping Name: Consumer Commodity
Hazard Class: ORM-D
UN Number: N/A
Packing Group: N/A
Hazard Label: None
Carton Marking: Consumer Commodity, ORM-D

OTHER PRECAUTIONS

Contents under pressure. Do not puncture or incinerate. Exposure to temperatures above 120°F may cause can to burst with violence and cause injury. Vapors are heavier than air and will collect in low areas.