

SAFETY DATA SHEET



Date Issued : 02/19/2019

SDS No : 1087

BD031

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BD031**PRODUCT DESCRIPTION:** R134a with UV Dye Leak Detector**DISTRIBUTOR**

TSI Products, Inc.
809 110th Street
Arlington, TX 76011

Emergency Contact: Ginger Stewart**Customer Service:** 817-649-2626 ext.154**24 HR. EMERGENCY TELEPHONE NUMBERS**

CHEMTREC: 800-255-3924

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS**Physical:**

Compressed Gases

GHS LABEL

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)



Gas cylinder

SIGNAL WORD: WARNING**HAZARD STATEMENTS**

H280: Contains gas under pressure; may explode if heated.

PRECAUTIONARY STATEMENTS**Storage:**

P410+P403: Protect from sunlight. Store in a well-ventilated place.

HAZARDS NOT OTHERWISE CLASSIFIED:

Liquid can cause burns similar to frostbite.

May displace oxygen and cause rapid suffocation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Linear alkylate additive	*	Proprietary
Dibasic acid ester	*	Proprietary
Polyalkylene glycol base fluid	*	Proprietary
1,1,1,2-tetrafluoroethane	> 97	811-97-2

UV Dye

*

COMMENTS: *Ingredients and composition are withheld as trade secret in accordance with 29CFR1910.1200(i).

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

SKIN: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

INGESTION: If swallowed, DO NOT induce vomiting. Call a physician or poison control center immediately. Rinse mouth with plenty of water. If victim is fully conscious, give a small glass of water. NEVER give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get immediate medical attention if symptoms persist.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

SKIN: Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry Chemical, CO₂, Foam, Fog or Water Spray.

HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, hydrogen fluoride, carbonyl fluoride.

FIRE FIGHTING PROCEDURES: Standard procedure for chemical fires. Clear fire area of all non-emergency personnel. Keep adjacent containers cool by spraying with water. Will float and can be reignited on surface water. The vapor is heavier than air, spreads along the ground and distant ignition is possible.

FIRE FIGHTING EQUIPMENT: Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. NFPA 1851; ISO 11999; EN469).

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Contain and soak up spill with absorbent material. Place residues in a suitable, sealed and labeled container.

LARGE SPILL: LARGE SPILLS: Shut off leak if safe to do so. Contain spill with inert, absorbent material. Reclam into recovery or salvage drums or vacuum truck for proper disposal.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Prevent contamination of water. Prevent material from entering drains or watercourses using sand, earth or other appropriate barriers. Do not flush into surface water or sanitary sewer system.

GENERAL PROCEDURES: Do not touch or walk through spilled material. Remove all possible sources of ignition. Ensure adequate ventilation. Use appropriate personal protective equipment.

SPECIAL PROTECTIVE EQUIPMENT: Use protective equipment recommended in Section 8.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid breathing of or direct contact with material. Only use in well ventilated areas. Wash thoroughly after handling.

HANDLING: Avoid contact with skin, eyes and clothing. Do not empty into drains.

STORAGE: Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems. Keep container tightly closed in a dry and well-ventilated place. Keep away from incompatible materials. Keep away from open flames, hot surfaces and sources of ignition. Keep away from direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)			
EXPOSURE LIMITS			
Chemical Name	Type	ppm	mg/m ³
1,1,1,2-tetrafluoroethane	Supplier OEL	TWA	1000

ENGINEERING CONTROLS: Provide adequate ventilation. Eye washes and showers for emergency use.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical splash goggles. Wear a full face shield where splashing is likely.

SKIN: Wear chemically resistant gloves.

RESPIRATORY: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and the safe working limits of the selected respirator.

PROTECTIVE CLOTHING: Wear protective clothing appropriate to the risk of exposure.

WORK HYGIENIC PRACTICES: Wash hands, forearms and face before eating, drinking, smoking and using the restroom. Launder contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOR: Neon yellow

PHYSICAL STATE COMMENTS: Compressed liquefied gas

pH: Not Available

FLASH POINT AND METHOD: 167°C

FLAMMABLE LIMITS: Not Available

AUTOIGNITION TEMPERATURE: Not Available

VAPOR PRESSURE: Not Available

VAPOR DENSITY: Not Available

BOILING POINT: Not Available

FREEZING POINT: Not Available

POUR POINT: Not Available

SOLUBILITY IN WATER: Partially Soluble

DENSITY: 1.021 g/cm³ at 20°C

VISCOSITY #1: 48 cSt at 40°C Kinematic

10. STABILITY AND REACTIVITY

REACTIVITY: Stable under normal conditions of use.

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Extreme temperatures and direct sunlight.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. Hydrogen fluoride and carbonyl fluoride if decomposition occurs at temperatures >250°C.

INCOMPATIBLE MATERIALS: Strong oxidizers. May react violently with alkaline-earth and alkali metals.

11. TOXICOLOGICAL INFORMATION**ACUTE TOXICITY**

DERMAL LD₅₀: No data available.

ORAL LD₅₀: No data available.

INHALATION LC₅₀: 1500 g/m³ - rat (4h)

NOTES: Information given is based on the toxicology of the components in the mixture.

SKIN CORROSION/IRRITATION: May cause slight skin irritation.

SERIOUS EYE DAMAGE/IRRITATION: May cause mild irritation to the eyes.

RESPIRATORY OR SKIN SENSITISATION: Not expected to be a sensitizer.

GERM CELL MUTAGENICITY: None Expected.

CARCINOGENICITY

NOTES: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, ACGIH or OSHA.

REPRODUCTIVE TOXICITY: None Expected.

STOT-SINGLE EXPOSURE: No data available.

STOT-REPEATED EXPOSURE: No data available.

ASPIRATION HAZARD: Not classified as an aspiration hazard.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Ecotoxicological data have not been determined specifically for this product. The information below is given based on knowledge of the components.

BIOACCUMULATION/ACCUMULATION: Low potential for bioaccumulation.

DISTRIBUTION: Not Available

AQUATIC TOXICITY (ACUTE): No known significant effects or critical hazards.

CHEMICAL FATE INFORMATION: Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of contents/container to a licensed contractor or facility in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: 1,1,1,2-Tetrafluoroethane

PRIMARY HAZARD CLASS/DIVISION: 2.2

UN/NA NUMBER: UN3159

PACKING GROUP: N/A

PLACARDS: Compressed gas

SPECIAL SHIPPING NOTES: Special provisions: T50

AIR (ICAO/IATA)

TECHNICAL NAME: 1,1,1,2-Tetrafluoroethane

UN/NA NUMBER: UN3159

PRIMARY HAZARD CLASS/DIVISION: 2.2

PACKING GROUP: N/A

PLACARDS: Compressed gas

VESSEL (IMO/IMDG)

SHIPPING NAME: 1,1,1,2-Tetrafluoroethane

UN/NA NUMBER: UN3159

PRIMARY HAZARD CLASS/DIVISION: 2.2

PACKING GROUP: N/A

PLACARDS: Compressed gas

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 PHYSICAL HAZARDS: Gases Under Pressure

313 REPORTABLE INGREDIENTS: All components listed or exempt.

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: NA = Not Applicable

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Contains no CERCLA regulated ingredients at detectable levels.

CERCLA RQ: NA = Not Applicable

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
1,1,1,2-tetrafluoroethane	811-97-2

TSCA STATUS: All components listed or exempt.

CALIFORNIA PROPOSITION 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

CANADA

DOMESTIC SUBSTANCE LIST (INVENTORY): All components are listed or exempt.

16. OTHER INFORMATION

REASON FOR ISSUE: Original Version

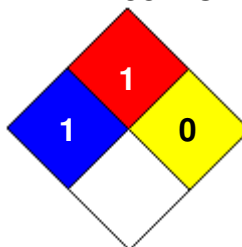
PREPARED BY: Shrieve Chemical Products HSE Department

Date Prepared: 02/19/2019

HMIS RATING

HEALTH	<input type="checkbox"/>	1
FLAMMABILITY	<input type="checkbox"/>	1
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	

NFPA CODES



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