



SAFETY DATA SHEET



1. Identification

Product Identifier: **Pol-Ease® 2300 Release Agent**
Pol-Ease® 2500 Release Agent
 Product Code(s): 2300, 2500
 Use: Aerosol release agent for mold making and casting. For Industrial/Professional use only.
 Manufacturer: Polytek Development Corp.
 55 Hilton St., Easton, PA 18042
 Phone Number: 610-559-8620 (9 a.m. to 5 p.m. EST)
 Emergency Phone: CHEMTREC 800-424-9300 or +1 (703) 527-3887
 E-mail: sds@polytek.com

2. Hazards Identification

GHS Classification:

Flammable Aerosol Category 2
 Gases Under Pressure – Liquefied gas

Label Elements: Warning



Hazard Phrases

H223 Flammable aerosol.
 H280 Contains gas under pressure; may explode if heated.

Precautionary Phrases

P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
 P211 Do not spray on an open flame or other ignition source.
 P251 Pressurized container: Do not pierce or burn, even after reuse.
 P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
 P381 Eliminate all ignition sources if safe to do so.
 P410+403+412 Protect from sunlight. Store in a well-ventilated place.
 Do not expose to temperatures exceeding 50°C/122°F.

Supplemental Information: Avoid breathing aerosol spray. Use in a well-ventilated area and wear a dust mask.

3. Composition/Information on Ingredients

Chemical Name	CAS #	%
Dimethyl ether	115-10-6	35-55
1,1-Difluoroethane	75-37-6	35-55

4. First-Aid Measures

Eye Contact: Rinse thoroughly with water for at least 15 minutes. Remove contact lenses if safe and easy to do so, and continue rinsing. Get medical attention if irritation persists.

Skin Contact: Wash contact area thoroughly with soap and water. Treat frostbite if needed. Get medical attention if irritation persists.

Inhalation: Remove person to fresh air. Get medical attention if symptoms persist.

Ingestion: Do not induce vomiting. Seek medical attention if symptoms develop.

Most Important Symptoms/Effects: Skin contact may cause skin drying and/or freezing. Breathing large amounts is harmful and may cause temporary central nervous system depression with anesthetic effects such as dizziness, headache, and loss of coordination and/or consciousness. Exposures to high concentrations can cause irregular heartbeat, cardiac arrest and death. Exposure to very high concentrations can cause asphyxiation.

Indication of Immediate Medical Attention/Special Treatment:

Because of possible disturbances of cardiac rhythm, catecholamine drugs, such as epinephrine, should only be used in emergency life support situations.

5. Fire-Fighting Measures

Extinguishing Media: Use water, foam, dry chemical or carbon dioxide. Use water spray to cool containers.

Specific Hazards: Extremely flammable. Keep away from heat, sparks and flames. Vapors are heavier than air and may travel long distances to ignition source. Containers may rupture or explode under fire conditions.

Combustion Products: Carbon monoxide, carbon dioxide, hydrofluoric acid, carbonyl fluoride, formaldehyde and other unidentified compounds.

Special Protective Equipment & Precautions for Fire-Fighters: Wear positive pressure, self-contained breathing apparatus and full-body protective clothing.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency

Procedures: Remove ignition sources. Clear non-emergency personnel from the area. Wear appropriate protective clothing to avoid eye and skin contact and avoid breathing vapor/aerosol.

Methods and Materials for Containment and Cleanup: Cover with an inert absorbent material and collect into an appropriate container for disposal.

7. Handling and Storage

Safe Handling: Keep away from heat, sparks, and open flames. Avoid breathing vapors, aerosols and mists. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in the work area.

Safe Storage: Store in a cool, dry area in a well-ventilated area away from ignition sources.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits: Manufacturer recommends exposure limit of 1000 ppm (TWA). For 1,1-Difluoroethane: 1000 ppm AIHA WEEL TWA.

Ventilation: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Respiratory Protection: If needed, wear a dust mask or a NIOSH-approved respirator with organic vapor cartridges.

Skin Protection: Wear impervious gloves, such as butyl rubber or nitrile rubber.

Eye Protection: Wear safety glasses or goggles.

Other Protective Measures: An eye wash facility and washing facility should be available in the work area. Follow applicable regulations and good Industrial Hygiene practice.

9. Physical and Chemical Properties

Appearance: Clear, colorless aerosol

Odor: Slight ethereal

Odor Threshold: No data available

pH: Not applicable

Melting Point: No data available

Boiling Point: No data available

Flash Point: Not applicable (aerosol)

Evap. Rate: 0.1-0.5 (n-butyl acetate = 1)

Flammability Limits: No data available

Vapor Pressure: 79 psig @ 20°C

Vapor Density: 2.04 (air = 1)

Relative Density: 0.8 @ 25°C

Solubility: Negligible in water (0-1%)
Partition Coefficient: No data available
Auto-Ignition Temp: No data available
Decomposition Temp: No data available
Viscosity: Not applicable (aerosol)
Chemical Heat of Combustion: 15 kJ/g

10. Stability and Reactivity

Reactivity: Not normally reactive.
Chemical Stability: Stable under recommended conditions.
Possibility of Hazardous Reactions: Reaction with peroxides may result in explosion.
Conditions to Avoid: Avoid excessive heat, sparks, flames and ignition sources. Avoid contact with alkalis, alkaline earth metals, powdered metals, oxidizers and organic acids.
Incompatible Materials: Avoid contact with oxidizing agents. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
Hazardous Decomposition Products: Hydrofluoric acid, carbonyl fluoride, carbon monoxide and carbon dioxide.

11. Toxicological Information

Eye Contact: May cause eye irritation and/or tissue damage.
Skin Contact: May cause skin irritation or freezing.
Inhalation: May cause mild respiratory irritation.
Ingestion: Not known.
Chronic Health Effects: No data available.
Acute Toxicity Values: Acute Toxicity Values:
Dimethyl ether: Rat LC_{50} >164,000 ppm
1,1-Difluoroethane: Mouse LC_{50} 977 gm/m³/2 hr
Germ Cell Mutagenicity: Components are not mutagens.
Carcinogenicity: To the best of our knowledge, this product does not contain constituents at concentrations exceeding 0.1% that are listed as carcinogens by IARC, NTP, or OSHA.
Reproductive Toxicity: Components are not reproductive toxins.
Specific Target Organ Toxicity: Single Exposure or Repeat Exposure: Not classified as STOT, however, excessive exposures may have harmful effects on the central nervous system.

12. Ecological Information

Ecotoxicity: This material is not classified as harmful to aquatic organisms.
Persistence and Degradability: No data available.
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.

13. Disposal Considerations

Dispose according to local, state and federal regulations. In US, upon disposal, may be RCRA hazardous waste (D003).

14. Transport Information

UN Number: 1950
UN Proper Shipping Name: Aerosols (For IATA: Aerosols, flammable)
Transport Hazard Class: 2.1
Packing Group: Not applicable
Environmental Hazards: Not applicable
Transport in Bulk: Not applicable
Special Precautions: None known
Emergency Shipping Info: CHEMTREC, 800-424-9300 or +1-703-527-3887

15. Regulatory Information

U.S. FEDERAL REGULATIONS:
CERCLA 103 Reportable Quantity: Not applicable.
SARA TITLE III
Section 311/312: Not applicable
Section 313 Toxic Chemicals: This product contains no chemicals subject to SARA Title III Section 313 Reporting requirements.
Section 302 Extremely Hazardous Substances (TPQ): None
EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on TSCA.
STATE REGULATIONS:
California Proposition 65: To the best of our knowledge, this product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other Information

Training Advice: All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.
Recommended Uses and Restrictions: This product is intended for Industrial/Professional use only.
SDS Revision Notes: Revised GHS Classification owing to completion of Ignition Distance Testing per UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS Purple Book), Rev. 3 (2.3.2.2) and 29 CFR 1910.1200, Appendix B (B.3.2.2).
Disclaimer: The information contained herein is considered accurate; however, Polytek® makes no warranty regarding the accuracy of the information. The user must determine the suitability of the product for the intended use and accepts all risk and liability associated with that use.