## Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

**1.1 Product Identifier(s): PolyPurge**
Product Code(s): PURGE

**1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:** Aerosol dry gas for prolonging shelf life of liquid rubber components. For Industrial/Professional use only.

**1.3 Details of the Supplier of the Safety Data Sheet**

Manufacturer: Polytek Development Corp.
55 Hilton St., Easton, PA 18042 USA
Phone: (+1) 610-559-8620 (9 a.m. to 5 p.m. EST)
E-mail: sds@polytek.com

EU OR: Stewardship Solutions
Green Lowe Farm, Shawclough Rd
Waterfoot, Rossendale, Lancs. BB4 9SA, UK
Phone: (+44) 01706 220901

**1.4 Emergency Telephone Number:** CHEMTREC (+1) 703-527-3887

## Section 2: Hazards Identification

**2.1 Classification of the Substance or Mixture:**

**CLP/GHS (No 1272/2008):** Gases Under Pressure – Liquefied gas

**2.2 Label Elements:** Warning!

Contains 1,1,1,2-Tetrafluoroethane

**Hazard Phrases**
H280 Contains gas under pressure; may explode if heated.

**Precautionary Phrases**
P410+403 Protect from sunlight. Store in a well-ventilated place.

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

**2.3 Other Hazards:** Skin contact may cause skin drying and/or freezing. Exposure to very high concentrations can cause asphyxiation. Avoid spraying directly on skin – may cause frostbite. Wear safety glasses.

## Section 3: Composition/Information on Ingredients

**3.2 Mixtures**

| Chemical Name | CAS # | EC # | CLP Classification | % |
|---|---|---|---|---|
| 1,1,1,2-Tetrafluoroethane | 811-97-2 | 212-377-0 | Gas Under Pressure – Liquefied Gas; H280 | 80-100 |

## Section 4: First-Aid Measures

**4.1 Description of First Aid Measures:**
**Eye:** Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Remove contact lenses if safe and easy to do so, and continue rinsing. Get medical attention if irritation persists.
**Skin:** 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.

**4.2 Most Important symptoms and effects, both acute and delayed:** Skin contact may cause skin drying and/or freezing. Exposure to very high concentrations can cause asphyxiation.

**4.3 Indication of any immediate medical attention and special treatment needed:** None known.

## Section 5: Fire-Fighting Measures

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

**5.2 Special Hazards Arising from the Substance or Mixture:**
**Unusual Fire and Explosion Hazards:** Containers may rupture or explode under fire conditions.

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

**5.3 Advice for Fire-Fighters:** Wear an approved, positive pressure, self-contained breathing apparatus and full-body protective clothing. Cool fire-exposed containers with water.

## Section 6: Accidental Release Measures

**6.1 Personal Precautions, Protective Equipment and Emergency Procedures:** Remove all ignition sources. Clear non-emergency personnel from the area. Wear appropriate protective clothing to avoid eye and skin contact and avoid breathing vapour/aerosol.

**6.2 Environmental Precautions:** Prevent release to the environment.

**6.3 Methods and Material for Containment and Cleaning Up:** Stop discharge if it can be done safely.

**6.4 Reference to Other Sections:** Refer to Section 8 for protective clothing and Section 13 for disposal.

## Section 7: Handling and Storage

**7.1 Precautions for Safe Handling:** 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.

**7.2 Conditions for Safe Storage, Including any Incompatibilities:** Store indoors at temperatures below 49°C (120°F) in a well-ventilated area.

**7.3 Specific end use(s):** Aerosol dry gas for prolonging shelf life of liquid rubber components.

## Section 8: Exposure Controls/Personal Protection

**8.1 Control Parameters:**

**Occupational Exposure Limits:** Manufacturer recommends exposure limit of 1000 ppm (TWA).

**Biological Exposure Index:** No data available.

**Derived No Effect Level (DNEL):** No data available.

**Predicted No Effect Concentration (PNEC):** No data available.

**8.2 Exposure Controls:**

**Ventilation:** Use with adequate general or local exhaust ventilation to minimize exposure levels.

**Respiratory Protection:** If needed, wear dust mask or an approved respirator with organic vapour cartridges. Follow applicable regulations and good Industrial Hygiene practice.

**Skin Protection:** Impervious gloves such as butyl rubber or nitrile rubber are recommended.

**Eye Protection**: Chemical safety glasses/goggles recommended.

**Other Protective Equipment:** None.

## Section 9: Physical and Chemical Properties

**9.1 Information on basic Physical and Chemical Properties**

**Appearance:** Clear colorless aerosol
**Odour:** Slight ethereal
**Odour Threshold:** No data available
**pH:** Not applicable
**Melting Point/Freezing Point:** No data available
**Boiling Point:** No data available
**Flash Point:** Not applicable (aerosol)
**Evaporation Rate:** 0.5-2 (n-butyl acetate = 1)
**Flammability (solid, gas):** Not applicable
**Flammable Limits:** No data available

**Vapour Pressure:** 80 psig @ 20°C
**Vapour Density:** 3.6 (air = 1)
**Relative Density:** 1.2 @ 25°C
**Solubility:** Negligible in water (0-1%)
**Partition Coefficient: n-Octanol/Water:** No data available
**Autoignition Temperature:** No data available
**Decomposition Temperature:** No data available
**Viscosity:** No data available
**Explosive Properties:** Aerosol can may rupture/explode if heated
**Oxidizing Properties:** Not oxidizing

**9.2 Other Information:** None available

## Section 10: Stability and Reactivity

**10.1 Reactivity:** Not normally reactive.

**10.2 Chemical Stability:** Stable under recommended conditions.

**10.3 Possibility of Hazardous Reactions:** Reactions with peroxides may result in explosion.

**10.4 Conditions to Avoid:** Avoid excessive heat, sparks, flames and ignition sources. Avoid contact with peroxides, alkalis, alkaline earth metals, powdered metals, oxidizers and organic acids.

**10.5 Incompatible Materials:** Peroxides, alkalis, alkaline earth metals, powdered metals, oxidizers and organic acids.

**10.6 Hazardous Decomposition Products:** Hydrofluoric acid, carbonyl fluoride, carbon monoxide and carbon dioxide, formaldehyde and other unidentified compounds.

## Section 11: Toxicological Information

**11.1 Information on Toxicological Effects:**

**Potential Health Effects:**

**Eye Contact:** May cause eye irritation and/or tissue damage.
**Skin Contact:** May cause skin irritation or freezing.
**Inhalation:** May cause mild respiratory irritation and/or asphyxiation.
**Ingestion:** Not known.

**Chronic Health Effects**: No data available.

**Acute Toxicity Values**:

1,1,1,2-Tetrafluoroethane: Rat 4-hr $LC_{50}$ >500,000 ppm

**Skin Corrosion/Irritation:** Possible skin irritant.
**Eye Damage/Irritation:** Possible eye irritant.
**Respiratory Irritation:** Possible respiratory irritant.
**Respiratory Sensitization:** Components are not respiratory sensitizers.
**Skin Sensitization:** Components are skin sensitizers.
**Germ Cell Mutagenicity:** Components are not mutagens.
**Carcinogenicity:** Components are not carcinogens.
**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.

## Section 12: Ecological Information

**12.1 Toxicity:** This material is not classified as harmful to aquatic organisms.
**12.2 Persistence and Degradability:** No data available.
**12.3 Bioaccumulative Potential:** No data available.
**12.4 Mobility in Soil:** No data available.
**12.5 Results of PBT and vPvB Assessment:** No data available.
**12.6 Other Adverse Effects:** No data available.

## Section 13: Disposal Considerations

**13.1 Waste Treatment Methods:** Dispose in accordance with all local, state and federal regulations.

## Section 14: Transport Information

**14.1 UN Number:** UN1950
**14.2 UN Proper Shipping Name:** Aerosols
**14.3 Transport Hazard Class(es):** 2.2
**14.4 Packing Group:** Not applicable
**14.5 Environmental Hazards:** Not applicable
**14.6 Special Precautions for User:** None
**14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable

## Section 15: Regulatory Information

**15.1 Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:**

**REACH:** Not imported to EU in >1 tonne/yr .
**EU Inventories:** All substances contained in PolyPurge are believed to be included on EINECS.

**15.2 Chemical Safety Assessment:** A Chemical Safety Assessment has not been conducted.

## Section 16: Other Information

**GHS Hazard Phrases from Section 3**

H280 Contains gas under pressure; may explode if heated.

**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.

**SDS Revision Note:** First EU SDS.

**Disclaimer:** The information contained herein is considered accurate; however, Polytek® Development Corp. 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.