



## **R5 and B5 Sprays (Discontinued)** **- New replacement are DeoxIT D5 and PreservIT P5 Sprays**

### SECTION I - IDENTIFICATION

**Name:**

**R-5 Spray** (Part No. R5-6),

**B-5 Spray** (Part No. B5-6).

**Company:**

CAIG Laboratories, Inc.  
12200 Thatcher Court  
Poway, CA 92064  
U.S.A.

**Emergency Telephone No.:**

For **R100L & B100L** (619) 486-8388  
For Freon TF and Dymel 152 -  
contact Dupont (800) 441-3637

### SECTION II - INGREDIENTS

**R-5 & B-5 =** Components -

1. *Trichlorotrifluoroethane* (specific name), FREON TF (common name),  $C_2Cl_3F_3$  (formula), 76-13-1 (CAS No.), 1000PPM (OSHA PEL), 1000PPM (ACGIH TLV), None (other limits recommended), % for R-2 = 77.5%, % for R-5 = 75.0%, % for B-5 = 75.0%.
2. *Difluoroethane* (specific name), DYMEL 152 (common name),  $CH_3CHF_2$  (formula), 75-37-6 (CAS No.), Not Established (OSHA PEL and ACGIH TLV), None (other limits recommended), R-5 & B-5 = 20%.
- 3a. *Cramolin Liquid R100L* (specific name), R100L (common name), Not Established (OSHA PEL and ACGIH TLV), % for R-5 = 5.0%.  
*Cramolin Liquid B100L* (specific name), B100L (common name), Not Established (OSHA PEL and ACGIH TLV), % for B-5 = 5%.

### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

**Boiling Point** (of FREON TF): 117.6°F      **Solubility in H<sub>2</sub>O**: Approx. 0.2%  
**Vapor Pressure** (mm Hg.) (of FREON TF): 334      **Appearance and Odor**: R-5 light  
**Vapor Density** (Air=1) (of FREON TF): 6.5      pink color of mixture. B-5 light blue  
**Specific Gravity** (H<sub>2</sub>O=1): @77°F = 1.57g/cc      color. Slight ethereal odor.  
**Melting Point**: N/A  
**Evaporation Rate** (Butyl Acetate=1): (CCI4=1) 0.1

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**Flash Point**: R100L & B100L liquid 170°C (A-P), mixture is non-flammable.  
**Flammable Limits**: Lower and Upper - Not established  
**Extinguishing Media**: If R100L & B100L liquid residue ignites - use foam, CO<sub>2</sub>, or Halon and breathing equipment.  
**Special Fire Fighting Procedures**: Use self contained breathing apparatus if open flame or red hot metals are present due to possible hazardous decomposition into hydrochloric and hydrofluoric acids and possible carbonyl halides.

### SECTION V - REACTIVITY DATA

**Stability**: Material is stable, however, avoid open flames and high temperatures.  
**Incompatibility (Materials to avoid)**: Alkali, alkaline earth metals - powdered Al, Zn, Be, etc.  
**Hazardous Decomposition or Byproducts**: This compound can be decomposed by high temperatures (open flame, glowing metal) forming hydrochloric & hydrofluoric acids and possible carbonyl halides.  
**Hazardous Polymerization**: Will not occur, however, avoid open flames and high temperatures.

### SECTION VI - HEALTH HAZARD DATA

**Principal Health Hazards:**

**Inhalation**: Vapor is heavier than air and can cause suffocation by reducing oxygen available for breathing. Breathing high concentrations of vapor may cause light-headedness, dizziness, shortness of breath, and may lead to narcosis, cardiac irregularities, unconsciousness or death. LC50 Rat 300,000 ppm/2 hr.

**Note**: In screening tests with experimental animals, exposure to Dymel or Freon TF at approximately 50,000 ppm (v/v) and above, followed by a large intravenous epinephrine challenge, has induced serious cardiac irregularities.

**Eye**: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

**Skin**: Flush with water. Get medical attention if irritation is present.

**Oral**: No specific intervention is indicated as the compound is not likely to be hazardous by ingestion. However, consult a physician if necessary. Do not induce vomiting as the hazard of aspirating the material into the lungs is a greater hazard than allowing it to progress through the intestinal tract.

**Medical Conditions Possibly Aggravated by Exposure:**

Cardiovascular Disease: See Principal Hazards: Inhalation Section.

**First Aid:**

**Inhalation**: Remove to fresh air, call a physician. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Do not give epinephrine or similar drugs.

**Note to Physicians**: Because of a possible increase risk of eliciting cardiac dysrhythmias, catecholamine drugs, such as epinephrine, should be considered only as a last resort in life threatening emergencies.

### SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE.

**Steps to be Taken in Case Material is Released or Spilled**: Ventilate area till odor is gone. Use self contained breathing apparatus for necessary prolonged exposure. After Freons have been removed by ventilation, clean up oily residue with any standard soap or detergent solution.

**Waste Disposal Method**: Comply with federal, state and local laws and regulations. EPA Hazardous waste #'s F001 & F002 may apply.

**Precautions to be Taken in Handling and Storing**: Do not expose any aerosol can to sunlight or temperatures above 120°F to prevent possible bursting. All aerosol cautions apply - use in well ventilated areas.

**Other Precautions**: As with any chemical preparation - use only as directed and wash hands after use.

### SECTION VIII - CONTROL MEASURES

**Respiratory Protection**: Not necessary unless used in an unventilated area or in high concentrations.

**Ventilation**: Keep windows open. Local Exhaust - when used repeatedly in quantity.

Mechanical - To prevent buildup in low areas. Special/Other - None

**Protective Gloves**: Not necessary.

**Eye Protection**: Suggested when using aerosols.

**Other Protective Clothing or Equipment**: Not necessary with adequate ventilation.

**Work/Hygienic Practices**: Avoid breathing vapors and contact with skin or eyes, use adequate ventilation.

### SECTION IX - SHIPPING CLASSIFICATION

Consumer commodity: **ORM-D**