

### MATERIAL SAFETY DATA SHEET DIRECTIVE 91/155/EEC

### 1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

- 1.1 Chemical Nature, Sales Name, Use: Refrigerant, Therma Frost Refrigerant Spray.
- 1.2 Company Identification:

**G&H Wire Company** 

P.O. Box 248

Greenwood, Indiana 46142

Telephone: 317-346-6655 Facsimile: 317-346-6663

1.3 Emergency Contact: 317-346-6655

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Tetrafluoroethane CAS# 811-97-2

### 3. HAZARDS IDENTIFICATION

- 3.1 Vapor inhalation (high concentration): heart irregularities, unconsciousness, or death.
- 3.2 Liquid contact: possible frostbite
- 3.3 For use outside the oral cavity

### 4. FIRST-AID MEASURES

- 4.1 Inhalation: Immediately move to fresh air. If breathing is difficult, call a physician.
- 4.2 Skin Contact: Immediately flush skin for at least 15 minutes with water. Call physician for treatment of frostbite if necessary.
- 4.3 Eye Contact: Immediately flush eyes with water for at least 15 minutes. Call a physician.
- 4.4 Ingestion: Not likely to occur.

### 5. FIRE-FIGHTING MEASURES

- 5.1 Suitable Extinguishing Media: As appropriate for surrounding combustibles.
- 5.2 Unsuitable Extinguishing Media:
- 5.3 Particular Hazards: High temperatures or contact with heated surfaces may cause containers to fail explosively. Thermal decomposition produces toxic byproducts.
- 5.4 Protective Equipment for Fire-Fighters: Wear self-contained breathing apparatus if fighting fires near product due to toxicity of decomposition byproducts. Cool fire exposed containers with water spray.

## 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal Precautions: Do not release in presence of open heat sources or flame. Avoid prolonged breathing of concentrated vapors and intentional misuse.
- 6.2 Environmental Precautions: N/A
- 6.3 Cleaning Methods: None

## 7. HANDLING AND STORAGE

Store in cool, dry, well-ventilated area away from heat source or open flame, incompatible materials, and direct sunlight. Avoid temperatures in excess of 120 degrees F.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Do not release in presence of open heat sources or flame. Avoid prolonged breathing of concentrated vapors and intentional misuse. Wear safety goggles and impervious synthetic rubber gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Form: liquefied gas

Color: colorless Odor: spearmint

9.2 Change of State:

Melting Point/Range:

Boiling Point: -26.4 degrees C

- 9.3 Flash Point
- 9.4 Ignition Point: Non flammable, CFC free
- 9.5 Vapor Pressure (20°C): 96 psi at 25 degrees C
- 9.6 Density (20°C):
- 9.7 Solubility in: Water (20°C):

Organic Solvent (20°C):

- 9.8 PH-Value (at  $10g/1H_20$ ):
- 9.10 Viscosity (20°C):

#### 10. STABILITY AND REACTIVITY

- 10.1 Thermal Decomposition:
- 10.2 Conditions to Avoid: Open flames, high temperatures
- 10.3 Materials to Avoid: Alkali or alkaline earth metals and strong oxidizing agents.
- 10.4 Hazardous Decomposition Products:

### 11. TOXICOLOGICAL INFORMATION

- 11.1 Oral Toxicity: Not defined
- 11.2 Inhalation: Not defined
- 11.3 Skin Irritation: Not defined
- 11.4 Sensitization: Not defined

- 11.5 Eye Irritation: Not defined
- 11.6 Further Details:

#### 12. ECOLOGICAL INFORMATION

- 12.1 Acute Toxicity in Fish (LC-50/48h)
- 12.2 Bacteria Toxicity (EC-0):
- 12.3 Biodegradability: None
- 12.4 Further Details: None

## 13. DISPOSAL CONSIDERATIONS

- 13.1 Product: In accordance with local, state, and federal regulations.
- 13.2 Packaging: In accordance with local, state, and federal regulations.
- 13.3 Waste Disposal Code: In accordance with local, state, and federal regulations.

# 14. TRANSPORT INFORMATION

- 14.1 Overland Transport ADR/RID/GGVS/GGVE:
- 14.2 Sea Transport GGVSEA/IMDG-Code:
- 14.3 Air Transport ICAO/IATA-DGR: Not for air transport per national regulations
- 14.4 Inland Waterway Transport ADNR:
- 14.5 Further Details: OMD labeling is required.

### 15. REGULATORY INFORMATION

Preparation as defined by the (German) Chemicals Act (dated 4/03/1990).

15.1 Labeling:

**Product Contains:** 

Danger Symbol:

R-Sentences R36/37/38:

S-Sentences S26:

S-Sentences S28:

15.2 National Regulation:

VbF:

TA-Air:

Water Pollution 1:

#### 16. OTHER INFORMATION

- 16.1 The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. Therefore, it should not be construed as guaranteeing specific properties.
- 16.2 Revision Date: November 28, 2006