



P.O. Box 248
Greenwood, IN 46142
800-526-1026 U.S. & Canada
317-346-6655 International
317-346-6663 Fax
E-mail: ghmail@ghwire.com

MATERIAL SAFETY DATA SHEET DIRECTIVE 91/155/EEC

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical Nature, Sales Name, Use: Fludropolymers used to coat 304 stainless steel wire for both long and short coated ligatures

1.1 Company Identification:

G&H Wire Company
P.O. Box 248
Greenwood, Indiana 46142
Telephone: 317-346-6655
Facsimile: 317-346-6663

1.2 Emergency Contact: 317-346-6655

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 **PFA** (Perfluoroalkoxy)Fluorocarbon-Tetrafluoroethylen-perfluoro (propyl vinyl ether) copolymer plus pigments -- **CAS 26655-00-5**

2.2 **FEP** Fluorinated Ethylene Propylene copolymer plus pigments -- **CAS 25067-11-2**

2.3 **ETFE** Tetrafluoroethylene-ethylene propylene copolymer plus pigments: polvinylidene fluoride --**CAS 25038-71-5**

3. HAZARDS IDENTIFICATION

3.1 Inhalation: Vapor and spray mist may be harmful if inhaled.

3.2 Skin Irritation: May cause moderate skin irritation. May be absorbed through skin.

3.3 Sensitization: Not defined

3.4 Eye Irritation: Causes eye irritation.

3.5 Further Details: N/A

3.6 Chronic Overexposure: Avoid long term and repeated contact of raw material

4. FIRST-AID MEASURES

4.1 Inhalation: If affected by inhalation of vapor or spray mist, remove to fresh air. Apply artificial respiration and other supportive measures as required.

4.2 Skin Contact: If molten polymer contacts skin, cool rapidly with cold water. In case of skin contact, flush immediately with plenty of water followed by washing with soap and water. Do not attempt to peel polymer from the skin and obtain medical help for thermal burns.

4.3 Eye Contact: In case of eye contact, flush eyes immediately with plenty of water for at least 15 minutes.

- 4.4 Ingestion: If swallowed, do not induce vomiting.

5. FIRE-FIGHTING MEASURES

- 5.1 Suitable Extinguishing Media: Use national fire protection association class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA class II combustible liquid fires.
- 5.2 Unsuitable Extinguishing Media: Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.
- 5.3 Particular Hazards: Closed containers may explode or burst (due to the build-up of steam pressure) when exposed to extreme heat.
- 5.4 Protective Equipment for Fire-Fighters: Fire fighters should wear self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal Precautions:
Inhalation: Where ventilation is inadequate, use a suitable respirator if temperature exceeds 260° C
Skin Contact: Wear protective clothing and gloves
Eye Contact: Wear safety goggles
Other equipment: Clean or discard contaminated clothing and shoes.
Ventilation Requirements: Use local exhaust to completely remove vapors and fumes liberated during hot processing from the work area.
- 6.2 Environmental Precautions: Advise authorities if material enters a water course or sewer. Contain floating material and skim from surface
- 6.3 Cleaning Methods: Landfill or incinerator in compliance with state and federal guidelines.

7. HANDLING AND STORAGE

- 7.1 Handling: Do not store above 120 degrees F (48C). Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids.
- 7.2 Storage: Do not store above 120 degrees F. Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids.
- 7.3 Storage Conditions: Do not store above 120 degrees F. Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Inhalation: Where ventilation is inadequate, use a suitable respirator.
Skin Contact: Wear protective clothing and gloves.
Eye Contact: Wear chemical type splash goggles.
Other equipment: Clean or discard contaminated clothing and shoes.

Ventilation Requirements: Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed below the lowest suggested exposure limits, LEL limit, and to remove decomposition products during welding or flame cutting on surfaces coated with this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Form: Pellets or Cubes
- 9.2 Color:
Odor: None.
- 9.3 Change of State: N/A
Melting Point/Range: 270° - 350° C
Boiling Point: N/A
- 9.4 Flash Point: 106 deg. F (41 C)
- 9.5 Ignition Point: Combustible
- 9.6 Vapor Pressure (20°C): 17.6 mm Hg
- 9.7 Density (20°C): specific gravity 1.7 – 2.2; Vapor Density: heavier than air
- 9.7 Solubility in: Water (20°C): 79.3%: Insoluble
- 9.8 PH-Value (at 10g/1H₂O): U/I
- 9.10 Viscosity (20°C):

10. STABILITY AND REACTIVITY

- 10.1 Thermal Decomposition: May produce hazardous decomposition product when heated. Welding, brazing, or flame cutting on surfaces coated with this product may produce fumes including: carbon monoxide, oxides of nitrogen
- 10.2 Conditions to Avoid: Avoid contact with strong alkalis, strong mineral acids, or strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

- 11.1 Oral Toxicity: Harmful or fatal if swallowed.
- 11.2 Inhalation: Vapor and spray mist may be harmful if inhaled.
- 11.3 Skin Irritation: May cause moderate skin irritation.
- 11.3 Sensitization: Not defined
- 11.4 Eye Irritation: Causes eye irritation.
- 11.5 Further Details:
- 11.7 Chronic Overexposure: Avoid long term and repeated contact.
- 11.8 Signs & symptoms of overexposure:
Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact.
Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

12. ECOLOGICAL INFORMATION

- 12.1 Acute Toxicity in Fish (LC-50/48h)
- 12.2 Bacteria Toxicity (EC-0):
- 12.3 Biodegradability:
- 12.4 Further Details:

13. DISPOSAL CONSIDERATIONS

- 13.1 Product: Waste material must be disposed of in accordance with federal, state, provincial, and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility.
- 13.2 Packaging:
- 13.3 Waste Disposal Code:

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:
- 14.4 Inland Waterway Transport ADNR:
- 14.5 Further Details:

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 Revised November 26, 2006