

MATERIAL SAFETY DATA SHEET**Product: Tygon® SE-200**Manufacturers Name: **Saint-Gobain
Performance Plastics**Emergency Telephone Number:
Call ChemTel:Address:
2664 Gilchrist Rd.
Akron, Ohio 443051-800-255-3924 USA
1-813-248-0585 International

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SECTION 1 - IDENTITY

- 1.1 Common Name (used on label): Tygon® SE-200 FEP Liner/PVC Jacket
 1.2 Chemical Name.....: N/A
 1.3 Chemical Family.....: Fluorinated Ethylene Propylene Copolymer liner
 w/Polyvinyl Chloride compounded organic
 polymer
 1.4 Formula.....: The specific chemical identity of the ingredients is
 considered a trade secret.

In reference to 40CFR, Section 313, part 372, community right to know, we classify Tygon® Tubing as an "Article" and therefore not subject to notification requirements.

SECTION 2 - HAZARDOUS INGREDIENTS

- 2.1 Principal Hazardous Component(s) (Chemical & Common Names)
 Threshold Limit Value
 a. Di-2-Ethylhexyl Phthalate (DOP or DEHP) 5mg/m³
 2.2 Principal Non-Hazardous Component(s) (Chemical & Common Names) Threshold
 Limit Value

All additives are physically bound in the manufacturing process and are not expected to create any hazard when the product is used in accordance with normal manufacturing and industrial hygiene practice and by following the guidelines on this sheet.

**SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS
(Fire & Explosion Data)**

- 3.1 Boiling Point.....: N/A
 3.2 Specific Gravity (H₂O=1).....: 1.20
 3.3 Vapor Pressure.....: 7 X 10⁻⁸ mm Hg, 20°C
 3.4 Percent Volatile by Volume.....: N/A
 3.5 Vapor Density (Air=1).....: N/A
 3.6 Evaporation Rate.....: N/A
 3.7 Solubility in Water.....: Negligible
 3.8 Melting Point.....: 275°C (for FEP)
 3.9 Appearance and Odor.....: Clear tubing; Slight odor.
 3.10 Flash Point.....: 500°F (260°C)(for PVC)

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- 3.11 Flammable Limits in Air by Volume.....: Lower: N/A Upper: N/A
- 3.12 Auto-Ignition Temperature...: N/A
- 3.13 Extinguisher Media.....: Water
- 3.14 Special Fire Fighting Procedures: Fire fighters should wear full protective clothing including a self-contained breathing apparatus & protective clothing to protect from acidic hydrogen fluoride fumes.
- 3.15 Unusual Fire & Explosion Hazards.....: Toxic fluorine compounds evolved in fire.

SECTION 4 - PHYSICAL HAZARDS

- 4.1 Stability.....: Stable: X Unstable:
Conditions to Avoid.....: Temperatures above 300°F will slowly decompose
liberation of HCl
oxygen
the tubing material resulting in the gas. FEP will burn in an atmosphere of 95% oxygen when an ignition source is present.
- 4.2 Incompatibility.....: None known
- 4.3 Hazardous Decomposition Products.....: When forced to burn, PVC compounds will mainly contribute CO, CO₂, and HCl as gases. FEP can evolve gaseous materials such as hydrogen fluoride and perfluoroolefins.
- 4.4 Hazardous Polymerization....: May Occur: Will Not Occur: X
Conditions to Avoid.....: None Known

SECTION 5 - HEALTH HAZARDS

- 5.1 Threshold Limit Value.....: N/E
- 5.2 Sign & Symptoms of Exposure:
1. Acute Overexposure.....: Toxicological testing has not been conducted with this material.
Route of Entry:
Eye Contact: See inhalation
Skin Contact: See inhalation
Inhalation: At temperatures above 300°F, fumes may be emitted that are irritating to respiratory tract, eyes, or skin of sensitive people.
Ingestion: N/A
2. Chronic Overexposure...: None Known

5.3 Medical Conditions Generally

Aggravated by Exposure...: There are no data available which address medical conditions which are generally recognized as being aggravated by exposure to this product.

5.4 Chemical Listed as Carcinogen or Potential Carcinogen.....:

National Toxicology Program:
Yes: No:
I.A.R.C. Monographs:
Yes: No:
OSHA:
Yes: Suspected No:
CALIF. PROP. 65:
Yes: DEHP

5.5 OSHA Permissible Exposure

Limit.....: 5 mg/m³ TWA

5.6 ACGIH Threshold Limit Value:

5 mg/m³ TWA, 10 mg/m³ STEL

5.7 Other Exposure Limit Used...:

Unknown

5.8 Emergency & First-Aid

Procedures.....:
affected

Inhalation: If irritation occurs, remove individual from area, refer to

physician.

Eyes: N/A
Skin: N/A
Ingestion: N/A

SECTION 6 - SPECIAL PROTECTION INFORMATION

6.1 Respiratory Protection.....:

N/R

6.2 Ventilation.....:

Local Exhaust: N/R
Mechanical-General: N/R
Mechanical-Special: N/R
Mechanical-Other: N/R

6.3 Protective Gloves.....:

N/R

6.4 Eye Protection.....:

N/R

6.5 Other Protective Clothing

or Equipment.....: Not Necessary

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

- 7.1 Precautions to be taken in Handling & Storage.....: Store cool and dry.
- 7.2 Other Precautions.....: N/A
- 7.3 Steps to be Taken in Case Material is Released or Spilled.....: N/A
- 7.4 Waste Disposal Methods.....: According to Local, State and Federal Regulations.

SECTION 8 - OTHER INFORMATION

- 8.1 Transportation Information...: DOT Shipping Name: N/A
DOT Hazard Class: N/A
DOT Label(s): N/A
UN/NA Number: N/A
Placards: None
IATA: N/A
IMO IMDG-Code: N/A
European Class:
RID (OCTI): N/A
ADR (ECE): N/A
RAR (IATA): N/A

8.2 The information and recommendations set forth herein are taken from sources believed to be accurate as of the date hereof, however, Saint-Gobain Performance Plastics Corporation makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.

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