

Hana Jung / RA Manager

#513, 27, Dunchon-daero 457beon-gil

Jungwon-gu, Seongnam-si

Gyeonggi-do, South Korea

13219

Phone: +82 70 4827 4863

E-mail: [junghn@purgo.co.kr](mailto:junghn@purgo.co.kr)

Date of Issue: 2017.06.12

**RE: Material Safety Data Sheet (MSDS) for OpenTex Non-Resorbable PTFE Membrane**

OpenTex Non-Resorbable PTFE Membrane is not considered to be or to contain hazardous chemicals based on evaluations made by Purgo Biologics Inc. with following MSDS of each raw material.

- PTFE sheet

Sincerely,

Completed by / Date



---

Hana Jung/2017.06.12

# Safety Data Sheet

## PTFE Extruded Unfilled Natural

### Section 1. Identification

Product Identifier	PTFE Extruded Unfilled Natural
Synonyms	Tubing; Beading; Special; Monofilament
Manufacturer Stock Numbers	N/A
Recommended use	This product is an article produced to customer specifications for various uses.
Uses advised against	N/A
Manufacturer Contact Address	

Phone

Emergency Phone

Fax

### Section 2. Hazards Identification

Classification	N/A
Signal Word	
Pictogram	
Hazard Statements	N/A
Precautionary Statements	
Response	N/A
Prevention	N/A
Storage	N/A
Disposal	N/A
Ingredients of unknown toxicity	0%
Hazards not Otherwise Classified	This SDS was prepared for an article which by OSHA standards is non-hazardous. There may be pertinent information within this document that applies to specific circumstances however the product as is has no hazardous properties and has no

known significant health effects expected under normal use and conditions.

No Data Available

### Section 3. Ingredients

CAS	Ingredient Name	Weight %
9002-84-0	Polytetrafluoroethylene	99.9% - Min

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First-Aid Measures

Inhalation	Not an expected route of exposure. If exposed to fumes from overheating or combustion, remove to fresh air. Keep warm and at rest. If breathing has stopped, give artificial respiration. Call a physician.
Skin Contact	This product is not likely to be hazardous, but cleanse skin after use. If contact with hot material occurs, immediately cool with plenty of cold water. Have burn treated by a physician.
Ingestion	Not an expected route of exposure.
Eye Contact	Rinse with water for 15 minutes. Remove contact lenses if present and easy to do. If eye irritation persists, get medical attention.

### Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Water spray, dry chemical, foam, or carbon dioxide.
Unsuitable Extinguishing Media	None
Fire Fighting Procedures	Keep personnel removed and upwind of fire. Wear a self-contained breathing apparatus and full protective equipment. Wear neoprene gloves when handling refuse from a fire.
Additional Information	Hazardous decomposition products including carbon dioxide, carbon monoxide, hydrogen fluoride, toxic gases, or particles may be formed during combustion. These products may cause severe eye, nose, throat, and lung irritation or toxic effects.

### Section 6. Accidental Release Measures

Containment & Clean-Up	Contain spill. Mechanically collect by sweeping and shoveling. Transfer to properly labeled containers for recycling or disposal.
------------------------	---

### Section 7. Handling and Storage

Precautions	Store away from extreme heat. Do not crush.
-------------	---

## Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Polytetrafluoroethylene	N/A	15 mg/m3	N/A
Personal Protective Equipment	Goggles, Gloves, Respirator			
Skin	Wear appropriate gloves when handling heated material to prevent thermal burns.			
Eye Protection	Wear safety glasses with side shields when cutting or grinding.			
Clothing	Wear protective clothing and boots as required.			
Respiratory	If thermal decomposition occurs, a NIOSH approved mask for acidic gases must be used to avoid inhalation of vapors in accordance with OSHA regulations.			

## Section 9. Physical and Chemical Properties

Physical State	Solid
Color	Translucent Clear
Odor	Odorless
Odor Threshold	N/A
Solubility	Insoluble
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	N/A
Specific Gravity	2.2
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	None
FP Method	N/A
Ph	N/A
Melting Point	327-342 C
Boiling Point	Not Applicable
Boiling Range	N/A
LEL	N/A
UEL	N/A
Evaporation Rate	N/A
Flammability	N/A
Decomposition Temperature	N/A
Auto-ignition Temperature	N/A
Vapor Pressure	N/A
Vapor Density	N/A

## Section 10. Stability and Reactivity

Stability	Stable at room temperature under normal storage and handling conditions.
Stability & Reactivity	Hazardous polymerization will not occur.

## Section 11. Toxicological Information

Acute Toxicity	No adverse effects observed.
Skin Effects	No irritant effects anticipated.
Eye Effects	No irritant effects anticipated.
Sensitization	No sensitizing effects known.
Additional Information	When heated for a long time, a very small quantity of hydrogen fluoride, carbonyl fluoride, and perfluoroisobutylene is generated. The higher the temperature above 380 C, the larger the amount it will release. Hydrogen fluoride and carbonyl fluoride may cause the following symptoms: burning sensation, cough, dizziness, headache, labored breathing, nausea, shortness of breath, sore throat, vomiting. Symptoms may be delayed. Inhalation of this gas may cause lung oedema. Perfluoroisobutylene may cause the following symptoms: irritated respiratory tract. Inhalation of this gas may cause lung oedema. The effects may be delayed. Medical observation is indicated.

## Section 12. Ecological Information

General Notes	Significant ecological effects are not expected under normal use.
Ecotoxicity	Ecotoxicity is expected to be low.
Degradation	This product may not degrade significantly in most natural environments.

## Section 13. Disposal

Waste Treatment Methods	Recycling is preferred. Where recycling is not possible, dispose of in accordance with all local and national regulations.
-------------------------	--

## Section 14. Transport Information

UN Number	N/A
UN Proper Shipping Name	N/A
DOT Classification	N/A
Packing Group	N/A
Additional Information	Not classified as hazardous or dangerous for means of transport.

## Section 15. Regulatory Information

Classification	This product is not classified as hazardous.
TSCA	The components of this product are in compliance with the chemical notification requirements of TSCA.
EIECS	All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances, or are exempt polymers whose monomers are listed.

## Section 16. Other Information

Revision Date

9/30/2014

Additional Information

The information in this Safety Data Sheet is believed to be correct as of the date issued. Products makes no warranties, expressed or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose or course of performance or usage of trade. User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for the user's method of use or application.