

## Saint-Gobain Tygon® S3â,,¢ E-LFL Long-Flex Life Pump Tubing Formulation

Category: Polymer, Thermoplastic

## **Material Notes:**

Tygon S3â,¢ E-LFL from Saint-Gobain Performance Plastics, is now phthalate-free. Saint-Gobain is proud to be among the first companies to offer sustainable flexible tubing products. The bio-based Tygon S3â,¢ line combines the high performance standards customers demand with an eco-friendly tubing design. The new Tygon S3â,¢ E-LFL non-DEHP tubing is our best performing peristaltic pump tubing. Tygon S3â,¢ E-LFL has been tested rigorously to ensure that it meets the same physical standards as the old Tygon® LFL tubing, including 1,000 hours of peristaltic pump tubing life at 0 psi back pressure, low particulate spallation and chemical resistance. Crystal-clear Tygon S3â,¢ E-LFL tubing is formulated specifically for use in peristaltic pump applications. With its superior flex life characteristics, manufacturing processes can be simplified by reducing production downtime due to pump tubing failure. The excellent wear properties of Tygon S3â,¢ E-Long Flex Life Pump Tubing also lead to a reduction of particulate spallation. This feature limits the risk of sensitive-fluid contamination critical to the pharmaceutical, cosmetic, food and beverage industries. Non-aging characteristics and broad chemical resistance provide users with versatility in use for a wide variety of applications. Safe and non-toxic Tygon S3â, ¢ E-Long Flex Life Pump Tubing can be produced in up to a 6" inside diameter, making it the ideal choice in bulk transfer applications. Applications Wide range of liquid transfer in labs Production filtration and fermentation Food & beverage and cosmetic processing Biopharmaceutical Surfactant delivery Flavor and vitamin concentrate dispensing Printing ink transfer Highly viscous fluid transfer Drum and tank drainage Shear-sensitive fluid transfer Features and Benefits Longest flex life of any clear Tygon® tubing -- reduces downtime due to pump failure Extremely low particulate spallation -- reliable for sensitive-fluid applications Broad chemical resistance -- excellent for laboratory applications Can be autoclaved -- suitable for high purity applications Contains no BPA or phthalate Regulatory Information: Tygon S3â, complies with FDA, NSF, 3-A, USP Class VI, ISO 10993, Japan Food Sanitation Law # 370/1959, REACH, 1935/2004/EC and 10/2011/EC for many foods and beverages. Tygon S3â,¢ tubing products do not contain chemicals listed in California's Prop 65.Information provided by Saint Gobain Performance Products.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Saint-Gobain-Tygon-S3-E-LFL-Long-Flex-Life-Pump-Tubing-Formulation.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.17 g/cc	1.17 g/cc	ASTM D792
	0.20 %	0.20 %	
Water Absorption	@Temperature 22.8 °C, Time 86400 sec	@Temperature 73.0 °F, Time 24.0 hour	ASTM D570

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	56	56	ASTM D2240
	@Time 15.0 sec	@Time 0.00417 hour	
Tensile Strength	12.4 MPa	1800 psi	ASTM D412
	3.79 MPa	550 psi	
Tensile Strength, Yield			ASTM D412



Mechanical Properties	@Strain 100 % Metric	@Strajn 100 % English	Comments
	6.55 MPa	950 psi	ASTM D412
	@Strain 200 %	@Strain 200 %	AOTHIDATIZ
Elongation at Break	400 %	400 %	ASTM D412
Tear Strength	32.3 kN/m	184 pli	ASTM D1004
Compression Set	68 %	68 %	
	@Temperature 70.0 °C, Time 79200 sec	@Temperature 158 °F, Time 22.0 hour	ASTM D395
Tensile Set	54 %	54 %	ASTM D412

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	73.9 °C	165 °F	
Minimum Service Temperature, Air	-55.0 °C	-67.0 °F	temperature limit for flexibility
Brittleness Temperature	-46.1 °C	-51.0 °F	ASTM D746

Optical Properties	Metric	English	Comments
Transmission, Visible	90 %	90 %	Clear, but value not quantified

Compliance Properties	Metric	English	Comments
FDA	Yes	Yes	
NSF	Yes	Yes	
USP Class VI	Yes	Yes	

Descriptive Properties	Value	Comments
Color	Clear	

## **Contact Songhan Plastic Technology Co.,Ltd.**

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842 Mobile: +86 13061808058

Skype: lookpolymers

Address: United North Road 215, Fengxian District, Shanghai City, China