

## **Teknor Apex Sarlink® 3450 Thermoplastic Elastomer**

Category: Polymer, Thermoplastic, Elastomer, TPE, Thermoplastic Olefinic Elastomer (TPO)

## **Material Notes:**

A NSF certified, low hardness and multi-purpose thermoplastic elastomer (black and natural color) featuring excellent fluid resistance and high temperature performance. It can be processed by injection molding, blow molding or extrusion for applications in contact with potable water, such as pipes, fittings and appurtenances. Processing and Handling (See more in property table) Sarlink® 3450 is a polypropylene based elastomer, which can be processed on conventional thermoplastic equipment for injection molding and extrusion. This product has a wide processing window in most applications. Melt temperatures from 360°F to 430°F can be used. Do not exceed 450°F. Drying is recommended for extrusion and blow molding and any time the material is used from an unsealed package. Extrusion screen pack is 20 to 60 mesh. PURGINGThis product has excellent melt stability. Empty the barrel for idle periods of thirty (30) minutes or longer. Purge thoroughly before and after use of this product with polyethylene or polypropylene. RECYCLING/REGRINDThis product can be reprocessed. Physical properties are generally not degraded. Dry regrind prior to reprocessing. COLORINGThe use of polyolefin based color concentrates is recommended. Apply back pressure in injection molding to disperse color. BONDING/ASSEMBLYSTORAGE and HANDLINGThis product is available in 55 lb. foil lined bags (up to 2,200 lbs. per pallet) or 1,100 lb. polyethylene lined gaylords. It has a storage life at normal temperatures of several years. Please refer to the Material Safety Data Sheet for this grade prior to first time handling. Sarlink® was sold from DSM to Teknor Apex

Order this product through the following link: http://www.lookpolymers.com/polymer\_Teknor-Apex-Sarlink-3450-Thermoplastic-Elastomer.php

Physical Properties	Metric	English	Comments
Density	0.940 g/cc	0.0340 lb/in³	ASTM D792

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	54	54	extruded sample; 5 sec. delay; ASTM D2240
	57	57	injection molded sample; 5 sec. delay; ASTM D2240
Tensile Strength at Break	3.30 MPa	479 psi	Die C; Flow direction; ASTM D412
	4.70 MPa	682 psi	Die C; Cross direction; ASTM D412
Elongation at Break	316 %	316 %	Die C; Flow direction; ASTM D412
	581 %	581 %	Die C; Cross direction; ASTM D412
100% Modulus	0.00180 GPa	0.261 ksi	Die C; Cross direction; ASTM D412
	0.00220 GPa	0.319 ksi	Die C; Flow direction; ASTM D412
Tear Strength	24.0 kN/m	137 pli	Die C; Cross direction; ASTM D624
Compression Set	20 %	20 %	22h/23°C; ASTM D395B



Mechanical Properties	Metric	English	Comments D395B
	@Temperature 100 °C	@Temperature 212 °F	

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	182 - 204 °C	360 - 400 °F	Extrusion
	177 - 216 °C	350 - 420 °F	Injection Molding
Middle Barrel Temperature	182 - 204 °C	360 - 400 °F	Extrusion Transition Zone
	177 - 216 °C	350 - 420 °F	Injection Molding
	188 - 210 °C	370 - 410 °F	Extrusion Metering Zone
Front Barrel Temperature	177 - 216 °C	350 - 420 °F	Injection Molding
	188 - 210 °C	370 - 410 °F	Extrusion
Nozzle Temperature	188 - 221 °C	370 - 430 °F	Injection Molding
Die Temperature	193 - 216 °C	380 - 420 °F	Extrusion
Melt Temperature	182 - 221 °C	360 - 430 °F	Injection Molding
	193 - 216 °C	380 - 420 °F	Extrusion
Mold Temperature	10.0 - 65.6 °C	50.0 - 150 °F	Injection Molding
Roll Temperature	21.1 - 48.9 °C	70.0 - 120 °F	Extrusion
Drying Temperature	82.2 °C	180 °F	
Dry Time	3 hour	3 hour	
Injection Pressure	0.0689 - 1.03 MPa	10.0 - 150 psi	Injection Molding Back Pressure
Screw Speed	100 - 200 rpm	100 - 200 rpm	Injection Molding

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

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