

Teknor Apex Sarlink® 4380 Thermoplastic Elastomer

Category : Polymer , Thermoplastic , Elastomer, TPE , Thermoplastic Olefinic Elastomer (TPO) , Vinyl (PVC) , PVC, Wire and Cable Grade

Material Notes:

A highly engineered thermoplastic elastomer for use in demanding applications. Sarlink® 4380 is a flame retardant, medium hardness grade processing exceptional chemical resistance, compression set and high temperature performance. This product can be processed by injection molding or extrusion. Applications include wire and cable insulation, electrical connectors, seals gaskets and boots. Processing and Handling (See more in property table) Sarlink® 4380 is a polypropylene based elastomer which can be processed on conventional thermoplastic equipment for injection molding, extrusion and blow molding. This product has a wide processing window in most applications. Melt temperatures from 360°F to 420°F can be used. Do not exceed 430°F. Drying is recommended for extrusion and injection molding and any time the material is used from an unsealed package. Extrusion screen pack is 20 to 60 mesh. PURGING This 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/REGRIND This product can be reprocessed. Physical properties are generally not degraded. Dry regrind prior to reprocessing. COLORING The use of polyolefin based color concentrates is recommended. Apply back pressure in injection molding to disperse color. BONDING/ASSEMBLY Thermal bonding techniques can be used to form high strength bonds. Adhesive bonding can be achieved with specialized adhesives. Bond strength is limited due to the polypropylene base of this material. STORAGE and HANDLING This 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-4380-Thermoplastic-Elastomer.php

| Physical Properties | Metric | English | Comments |
|---------------------|-----------|---------------------------|-----------|
| Density | 1.30 g/cc | 0.0470 lb/in ³ | ASTM D792 |

| Mechanical Properties | Metric | English | Comments |
|---------------------------|---------------------------------|-----------------------------|---------------------------------------------------|
| Hardness, Shore A | 82 | 82 | injection molded sample; 5 sec. delay; ASTM D2240 |
| Tensile Strength at Break | 7.398 MPa | 1073 psi | ASTM D412 |
| Elongation at Break | 450 % | 450 % | ASTM D412 |
| 100% Modulus | 0.00360 GPa | 0.522 ksi | ASTM D412 |
| Compression Set | 44 % @Temperature 70.0 °C | 44 % @Temperature 158 °F | 22hr; ASTM D395 |

| Thermal Properties | Metric | English | Comments |
|--------------------|---------------------------|-----------------------------|----------|
| Flammability, UL94 | V-0 @Thickness 1.20 mm | V-0 @Thickness 0.0472 in | |

| Thermal Properties | Metric | English | Comments |
|--------------------|--------|---------|----------|
|--------------------|--------|---------|----------|

| Electrical Properties | Metric | English | Comments |
|-----------------------|--------|---------|----------|
|-----------------------|--------|---------|----------|

| | | | |
|---------------------|----------------------------|----------------------------|--------------------------------|
| Dielectric Constant | 2.86 @Frequency 60 Hz | 2.86 @Frequency 60 Hz | ASTM D150 |
| Dielectric Strength | 21.65 kV/mm | 549.9 kV/in | 1" electrode in air; ASTM D149 |
| Dissipation Factor | 0.0105 @Frequency 60 Hz | 0.0105 @Frequency 60 Hz | ASTM D150 |

| Processing Properties | Metric | English | Comments |
|-----------------------|--------|---------|----------|
|-----------------------|--------|---------|----------|

| | | | |
|---------------------------|-------------------|----------------|---------------------------------|
| Rear Barrel Temperature | 177 - 204 Â°C | 350 - 400 Â°F | Injection Molding |
| | 182 - 204 Â°C | 360 - 400 Â°F | Extrusion |
| Middle Barrel Temperature | 177 - 204 Â°C | 350 - 400 Â°F | Injection Molding |
| | 182 - 204 Â°C | 360 - 400 Â°F | Extrusion Transition Zone |
| | 188 - 204 Â°C | 370 - 400 Â°F | Extrusion Metering Zone |
| Front Barrel Temperature | 177 - 210 Â°C | 350 - 410 Â°F | Injection Molding |
| | 188 - 204 Â°C | 370 - 400 Â°F | Extrusion |
| Nozzle Temperature | 199 - 216 Â°C | 390 - 420 Â°F | Injection Molding |
| Die Temperature | 193 - 210 Â°C | 380 - 410 Â°F | Extrusion |
| Melt Temperature | 182 - 216 Â°C | 360 - 420 Â°F | Injection Molding |
| | 193 - 210 Â°C | 380 - 410 Â°F | Extrusion |
| Mold Temperature | 10.0 - 65.6 Â°C | 50.0 - 150 Â°F | Injection Molding |
| Roll Temperature | 21.1 - 48.9 Â°C | 70.0 - 120 Â°F | Extrusion |
| Drying Temperature | 82.2 Â°C | 180 Â°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.

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