Sarlink® TPV 3135

Thermoplastic Vulcanizate

Teknor Apex Company

Message:

A low hardness, multi-purpose thermoplastic elastomer featuring excellent compression set and high temperature performance. Sarlink® 3135 can be processed by injection molding or extrusion for applications such as grips, seals, gaskets, profiles and other articles.

General Information	
UL YellowCard	E54709-101009565
Features	High melt stability Heat resistance, high General Hardness, low
Uses	Washer Seals Profile
Appearance	Opacity
Forms	Particle
Processing Method	Extrusion Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.930	g/cm³	ASTM D792, ISO 1183
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240, ISO 868
Shaw A, 5 seconds, extruded	38		ASTM D2240, ISO 868
Shore A, 5 seconds, injection molding	43		ASTM D2240, ISO 868
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress			ASTM D412, ISO 37
Transverse flow: 100% strain	1.10	MPa	ASTM D412, ISO 37
Flow: 100% strain	2.10	MPa	ASTM D412, ISO 37
Tensile Stress			ASTM D412, ISO 37
Transverse flow: Fracture	4.00	MPa	ASTM D412, ISO 37
Flow: Fracture	2.20	MPa	ASTM D412, ISO 37
Tensile Elongation			
Transverse flow: Fracture	600	%	ASTM D412, ISO 37
Flow: Fracture	200	%	ISO 37, ASTM D412
Tear Strength - Across Flow			

--	15	kN/m	ASTM D624
-- [1]	15	kN/m	ISO 34-1
Compression Set			ASTM D395, ISO 815
23°C, 22 hr	15	%	ASTM D395, ISO 815
70°C, 22 hr	30	%	ASTM D395, ISO 815
125°C, 70 hr	52	%	ASTM D395, ISO 815
Aging	**Nominal Value**	**Unit**	**Test Method**
Change in Tensile Strength in Air - Across Flow			ASTM D573, ISO 188
135°C, 1000 hr	0.0	%	ASTM D573, ISO 188
100% strain 135°C, 1000 hr	4.0	%	ASTM D573, ISO 188
150°C, 168 hr	4.0	%	ASTM D573, ISO 188
100% strain 150°C, 168 hr	11	%	ASTM D573, ISO 188
Changes in tensile stress upon fracture in air-Transverse flow			
135°C, 1000 hr	-2.0	%	ASTM D573, ISO 188
150°C, 168 hr	1.0	%	ISO 188, ASTM D573
Change in Shore Hardness in Air			
Support a, 135°C, 1000 hr	-1.0		ASTM D573, ISO 188
Support a, 150°C, 168 hr	1.0		ISO 188, ASTM D573
Change in Volume (125°C, 70 hr, in IRM 903 Oil)	150	%	ASTM D471, ISO 1817
Thermal	**Nominal Value**	**Unit**	**Test Method**
RTI Elec	50.0	°C	UL 746
RTI Imp	50.0	°C	UL 746
RTI	50.0	°C	UL 746
Flammability	**Nominal Value**		**Test Method**
Flame Rating (1.50 mm, All Colors)	HB		UL 94
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Apparent Shear Viscosity - Capillary, @ 206/s			
200°C	270	Pa·s	ASTM D3835
200°C	270	Pa·s	ISO 11443
Injection	**Nominal Value**	**Unit**	
Drying Temperature	82.2	°C	
Drying Time	3.0	hr	
Rear Temperature	177 - 216	°C	
Middle Temperature	177 - 216	°C	
Front Temperature	177 - 216	°C	
Nozzle Temperature	188 - 221	°C	
Processing (Melt) Temp	182 - 221	°C	
Mold Temperature	10.0 - 65.6	°C	
Back Pressure	0.0689 - 0.345	MPa	

Screw Speed	100 - 200	rpm
Screw L/D Ratio	20.0:1.0	

Extrusion	Nominal Value	Unit
Drying Temperature	82.2	°C
Drying Time	3.0	hr
Cylinder Zone 1 Temp.	182 - 204	°C
Cylinder Zone 2 Temp.	182 - 204	°C
Cylinder Zone 3 Temp.	188 - 210	°C
Cylinder Zone 4 Temp.	188 - 210	°C
Melt Temperature	193 - 216	°C
Die Temperature	193 - 216	°C
Take-Off Roll	21.1 - 48.9	°C

Extrusion instructions
Screw Pack: 20 to 60 MeshScrew: General PurposeCompression Ratio: 3:1

NOTE	
1.	Method B, right-angle specimen (without cut)

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China