Synprene™ RT-5180 RoHS Natural

Styrene Butadiene Block Copolymer

Key Characteristics

Product Description			
Synprene™ thermoplastic elastomers (TPEs) are compounds based on styrenic block copolymer (SBC) technology, and can be formulated to deliver extremely low hardness values not found in other elastomers. These materials are ideal for applications requiring flexibility over a wide temperature range, excellent colorability, broad processing capability and durability.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Flame Retardant		
Uses	• Construction Applications • Consumer Applications	• Industrial Applications • Wire & Cable Applications	
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.26	1.26	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	3.5 g/10 min	3.5 g/10 min	ASTM D1238
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [2] (Break)	1550 psi	10.7 MPa	ASTM D412A
Tensile Elongation [2] (Break)	600 %	600 %	ASTM D412A
Tear Strength [3]	230 lbf/in	40.3 kN/m	ASTM D624
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 10 sec)	80	80	ASTM D2240
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Dielectric Strength	1100 V/mil	42 kV/mm	ASTM D149
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating			UL 94
0.06 in (1.5 mm), NC	V-0	V-0	
0.12 in (3.0 mm), NC	V-0	V-0	

Notes

[1] Typical values are not to be construed as specifications.

[2] 20 in/min (510 mm/min)

[3] Die C, 20 in/min (510 mm/min)