SANTOPRENE® 121-67W175J

A soft, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material combines good physical properties and chemical resistance, and is designed for thin wall or complex profile extrusion applications. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for extrusion, thermoforming or vacuum forming. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- Recommended for applications requiring excellent flex fatigue resistance
- Excellent ozone resistance
- Designed for improved UV resistance
- Designed for extruding thin wall sections with excellent definition (down to 0.33 mm [0.013”] radius) and to maximize run length with minimal build-up of material on screen packs or narrow sections of dies

Typical mechanical properties

Stress at 100% elongation	419	psi	ISO 527-1/-2 or ISO 37
Stress at break	991	psi	ISO 527-1/-2 or ISO 37
Elongation at break	432	%	ISO 527-1/-2 or ISO 37
Brittleness Temperature	-74	°F	ASTM D 746
Low temperature brittleness	-74.2	°F	ISO 812
Shore A hardness, 15s	72		ISO 48-4 / ISO 868
Shore hardness change, after ageing			ISO 48-4 / ISO 868
Compression set at 70°C, 24h	29	%	ISO 815
Compression Set, 125°C, 70h	43	%	ISO 815
Tear strength, normal	138	lb/in	ISO 34-1

Specific Application Suitability

Continuous Upper Temperature Resistance, 1000h	275	°F	SAE J2236

Electrical properties

Electric Strength, Short Time, 2mm	660	kV/in	ASTM D 149

Other properties

Density	506	lb/gal	ISO 1183

Extrusion

Drying Temperature	180	°F
Drying Time, Dehumidified Dryer	3	h
Melt Temperature Range	351 - 399	°F

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Processing Texts

Processing Notes	Desiccant drying for 3 hours at 80°C (180°F) is recommended. Santoprene® TPV has a wide temperature processing window from 175 to 230°C (350 to 450°F) and is incompatible with acetal and PVC. Do not exceed 15% drawdown.