

SANTOPRENE® 123-40M100 DEV (PRELIMINARY)

A hard, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material combines good physical properties and chemical resistance for use in a wide range of applications. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding. 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

Typical mechanical properties

Stress at 100% elongation	1420 psi	ISO 527-1/-2 or ISO 37
Stress at break	2070 psi	ISO 527-1/-2 or ISO 37
Elongation at break	560 %	ISO 527-1/-2 or ISO 37
Brittleness Temperature	-72 °F	ASTM D 746
Low temperature brittleness	-72.4 °F	ISO 812
Shore D hardness, 15s	43	ISO 48-4 / ISO 868
Shore D hardness, 168h at 150°C	2	ISO 48-4 / ISO 868

Electrical properties

Electric Strength, Short Time, 2mm	787 kV/in	ASTM D 149
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Other properties

Density	482 lb/gal	ISO 1183
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Injection

Drying Temperature	180 °F
Drying Time, Dehumidified Dryer	3 h
Processing Moisture Content	0.08 %
Max. regrind level	20 %
Max. mould temperature	50 - 126 °F
Vent depth	1 mil
Back pressure	50 - 99.9 psi
Injection speed	fast

Extrusion

Drying Temperature	180 °F
Drying Time, Dehumidified Dryer	3 h
Melt Temperature Range	410 °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.
