

SANTOPRENE® 121-50E500

A soft, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material has controlled rheology for robotic or specialty extrusion applications. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for extrusion. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- Designed for applications requiring good elastic recovery
- Designed for improved UV resistance
- Recommended for applications requiring superior part surface appearance

Typical mechanical properties

Stress at 100% elongation	247 psi	ISO 527-1/-2 or ISO 37
Stress at break	580 psi	ISO 527-1/-2 or ISO 37
Elongation at break	450 %	ISO 527-1/-2 or ISO 37
Brittleness Temperature	-78 °F	ASTM D 746
Low temperature brittleness	-77.8 °F	ISO 812
Shore A hardness, 15s	56	ISO 48-4 / ISO 868
Shore hardness change, after ageing	-1	ISO 48-4 / ISO 868
Compression set at 70 °C, 24h	23 %	ISO 815
Compression Set, 125 °C, 70h	41 %	ISO 815

Other properties

Density	474 lb/gal	ISO 1183
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Processing Texts

Processing Notes	Desiccant drying for 3 hours at 80 °C (180 °F) is recommended. This grade of Santoprene® TPV has a wide temperature processing window from 190 to 230 °C (375 to 445 °F) and is incompatible with acetal and PVC.
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Other Approvals

Other Approvals	
OEM	Specification
Mercedes-Benz Group (Daimler)	DBL 5562
VW Group	VW50123