

SANTOPRENE® 181-55MED

SANTOPRENE®

A soft, black, specialty thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. It is designed for use in medical and healthcare applications. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding or extrusion. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- Biocompatibility in tests corresponding to USP Class VI/ISO 10993
- A representative grade undergoes annual testing for cytotoxicity and heavy metals
- Drug master file maintained with the FDA

Product information

Resin Identification	TPV	ISO 1043
Part Marking Code	>TPV<	ISO 11469

Typical mechanical properties

Tensile stress at 100% elongation, perpendicular	2.1 MPa	ISO 37
Stress at break, perpendicular	6.1 MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	440 %	ISO 527-1/-2 or ISO 37
Shore A hardness, 15s	59	ISO 48-4 / ISO 868
Compression set, 23 °C	19 %	ISO 815
Time	168 h	

Physical/Other properties

Density	980 kg/m ³	ISO 1183
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Injection

Ejection temperature	88 °C
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Additional information

Processing Notes

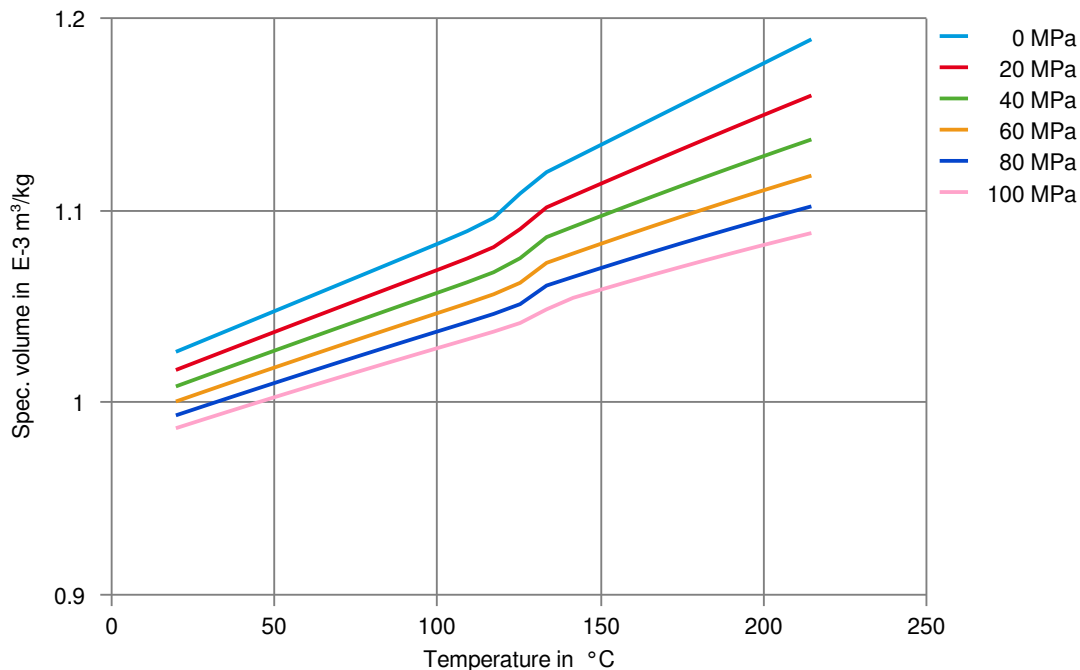
Processing Notes

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 in the molten state.

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Specific volume-temperature (pvT)



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