

SANTOPRENE® 281-55MED

A soft, colorable, 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

Typical mechanical properties

Stress at 100% elongation	290 psi	ISO 527-1/-2 or ISO 37
Stress at break	711 psi	ISO 527-1/-2 or ISO 37
Elongation at break	410 %	ISO 527-1/-2 or ISO 37
Shore A hardness, 15s	60	ISO 48-4 / ISO 868
Compression set at 23°C	20 %	ISO 815
Tensile set	5 %	ISO 2285

Other properties

Density	500 lb/gal	ISO 1183
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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 in the molten state.
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