

SANTOPRENE™ 251-85W232 - TPV

Product Description

A hard, colorable, flame retardant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material has good fluid resistance and contains non-ether brominated flame retardants. It does not contain metal deactivators. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding, extrusion, blow molding, thermoforming or vacuum forming. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- UL listed: file #QMFZ2.E80017, Plastics - Component; file #QMFZ8.E80017, Plastics Certified For Canada - Component; file #QMTT2.E86313, Polymeric Materials for Use in Wire, Cable and Flexible Lighting Products - Component.
- Recommended for applications requiring a flame retardant material - UL 94 Vertical Flame rated.
- Recommended for applications requiring excellent flex fatigue resistance.
- Recommended for applications requiring excellent ozone resistance.

Characteristics

Applications	Automotive - Flame Retardant Connectors and Seals, Electrical - Flame Retardant Connectors and Seals, Electrical - Flame Retardant Wire and Cable Jacket, Seals
Uses	Automotive applications, Cable jacketing, Flexible cord jacketing, Wire & cable applications
Agency Ratings	UL QMFZ2, UL QMFZ8, UL QMTT2
UL File Number	E80017, E86313
Color	Natural color
Delivery Form	Pellets
Processing	Blow molding, Coextrusion, Extrusion, Extrusion blow molding, Injection blow molding, Injection molding, Multi injection molding, Profile extrusion, Sheet extrusion, Thermoforming, Vacuum forming

Physical properties	Value	Unit	Test Standard
Density	71.8	lb/ft ³	ASTM D792
Density	71.8	lb/ft ³	ISO 1183

Hardness	Value	Unit
Shore A hardness-TPE, 15s	89	ISO 868

Mechanical properties	Value	Unit	Test Standard
Tensile stress at 100%, perpendicular	653	psi	ASTM D412
Tensile stress at 100%, perpendicular	653	psi	ISO 37
Tensile strength at break elast, perpendicular	1540	psi	ASTM D412
Tensile stress at break, perpendicular	1540	psi	ISO 37
Elongation at break elast, perpendicular	540	%	ASTM D412
Tensile strain at break, perpendicular	540	%	ISO 37

Flammability	Value	Unit
Flame rating, 0.75 mm	V-2	UL 94

Other text information

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.