Celanese
The chemistry inside innovation™

SANTOPRENE® 121-70B230

SANTOPRENE®

A soft, black thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material is specially formulated to bond to sulfur or peroxide-cured thermoset EPDM rubber for corner molding, end caps and special fixation applications, and for COF enhancement. 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

- Specially formulated to replace thermoset EPDM rubber in automotive glass run channel corner molding applications
- Designed for shorter processing time compared to thermoset EPDM rubber
- Adheres to vulcanized EPDM rubber over wide range of temperatures
- Adheres to TPV over wide range of temperatures
- Enhanced COF properties
- Good UV resistance
- Low fogging
- Paint stain resistant

Product information

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

Typical mechanical properties

Tensile stress at 100% elongation, perpendicular	2.6	MPa	ISO 37
Stress at break, perpendicular	6.5	MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	470	%	ISO 527-1/-2 or ISO 37
Shore A hardness, 15s	74		ISO 48-4 / ISO 868
Compression set, 70°C, 24h	44	%	ISO 815

Physical/Other properties

Density	920	kg/m^3	ISO 1183

Injection

Melt Temperature Optimum	215	°C
Min. melt temperature	165	°C
Max. melt temperature	265	°C
Mold Temperature Optimum	50	°C
Min. mould temperature	20	°C
Max. mould temperature	80	°C
Ejection temperature	89	°C

Additional information

Processing Notes

Processing Notes

Desiccant drying for 3 hours at 65°C (150°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.

SANTOPRENE® 121-70B230

SANTOPRENE®

Specific volume-temperature (pvT)