

SANTOPRENE® 121-80B265

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Santoprene® 121-80B265 is a black thermoplastic vulcanizate (TPV) that combines low coefficient of friction with good bonding to TPV and EPDM rubber. This grade offers improved heat aging performance and excellent processability for injection molding of complex geometries with excellent surface aesthetics. It has low friction retention after heat aging without surface bleeding. It has been designed for corner molding and end cap of automotive extruded weather seals in TPV or in EPDM rubber.

Key Features

- Low friction injection molding grade
- Specially formulated to replace thermoset EPDM rubber in automotive glass run channel (GRC) corner molding applications
- Designed for shorter processing cycle time compared to thermoset EPDM rubber
- Adheres to vulcanized EPDM rubber and TPV
- Built-in low coefficient of friction properties
- Good flowability with excellent surface aspect

Product information

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

Typical mechanical properties

Shore A hardness, 15s	0.000079	ISO 48-4 / ISO 868
Compression set, 70°C, 24h	46 %	ISO 815
Tear strength, normal	32 kN/m	ISO 34-1

Physical/Other properties

Density	919 kg/m³	ISO 1183
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Injection

Drying Temperature	80 °C
Drying Time, Dehumidified Dryer	3 h
Processing Moisture Content	≤0.08 %
Max. regrind level	20 %
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	84 °C

Additional information

Processing Notes

Processing Notes

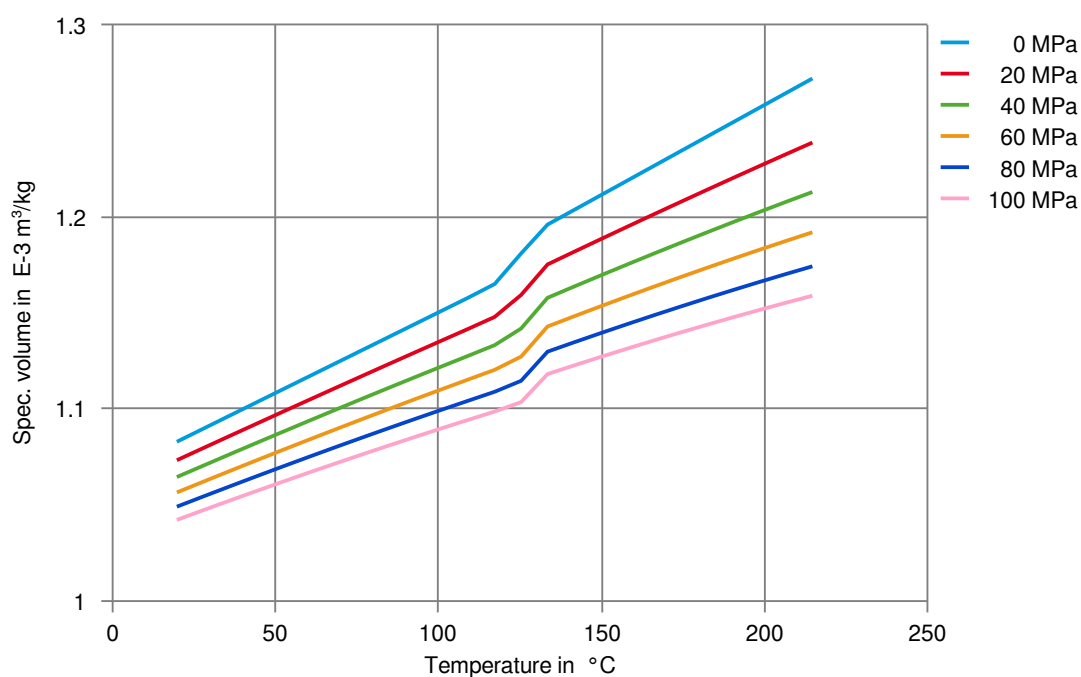
Desiccant drying for 3 hours at 80°C (180°F) is recommended. Santoprene® TPV has a wide temperature processing window from 175 to 230°C (350 to 450°F). In order to obtain good bonding on an EPDM sponge profile, the injection speed should be fast (60 - 100mm/sec) and at a very high temperature in a warm

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mold. The injection pressure should be moderate and the holding pressure kept low in order to prevent profile deformation. The profile should be perfectly positioned in the mold and maintained without deformation to ensure maximum surface interaction with the melt. Cooling time should be longer than a typical TPV in order to initiate recrystallization at the contact interface. Santoprene® TPV is incompatible with acetal and PVC.

Specific volume-temperature (pvT)



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Revised: 2024-02-06 Source: Celanese Materials Database

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