

SANTOPRENE® 163-40F500 (PRELIMINARY)

SANTOPRENE®

A black thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material is designed for coextrusion applications, particularly for the static foot of automotive weatherseal systems like glass run channels. This grade of Santoprene™ TPV is shear-dependent and can be processed on conventional thermoplastics equipment for extrusion or thermoforming. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- Recommended for coextruded applications not exposed to UV light.
- Recommended for applications requiring excellent ozone resistance.
- Designed to maximize run length with minimal build-up of material on screen packs or narrow sections of dies.

Product information

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

Typical mechanical properties

Tensile stress at 100% elongation, perpendicular	9.7 MPa	ISO 37
Stress at break, perpendicular	18 MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	590 %	ISO 527-1/-2 or ISO 37
Shore D hardness, 15s	43	ISO 48-4 / ISO 868

Physical/Other properties

Density	940 kg/m ³	ISO 1183
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Extrusion

Drying Temperature	82 °C
Drying Time, Dehumidified Dryer	3 h
Melt Temperature Range	177 - 204 °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) and is incompatible with acetal and PVC. Do not exceed 15% drawdown.

The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colourants or other additives may cause significant variations in data values. Properties of moulded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Other than those products expressly identified as medical grade (including by MT® product designation or otherwise), Celanese's products are not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication should not be construed as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products.

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