

SANTOPRENE® 101-73E100

SANTOPRENE®

A soft, black, versatile thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material combines good physical properties and chemical resistance for use in a wide range of applications. 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

- · Recommended for applications requiring excellent flex fatigue resistance
- Excellent ozone resistance

Product information			
Resin Identification	TP\	/	ISO 1043
Part Marking Code	>TPV<	<	ISO 11469
Typical mechanical properties			
Tensile stress at 100% elongation, per	rpendicular 3.4	1 MPa	ISO 37
Tensile stress at break, perpendicular	7.3	3 MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular) %	ISO 527-1/-2 or ISO 37
Brittleness Temperature		5 °C	ASTM D 746
Shore A hardness, 15s	79		ISO 48-4 / ISO 868
Compression set, 125°C, 70h		5 %	ISO 815
Tear strength, normal	22	2 kN/m	ISO 34-1
Flammability			
Burning rate, Thickness 2 mm	17	⁷ mm/min	ISO 3795 (FMVSS 302)
Injection			
Max. regrind level	20) %	
Back pressure	0.52	2 MPa	
Ejection temperature	90	3 °C	
Extrusion			
Drying Temperature	82	2 °C	
Drying Time, Dehumidified Dryer	3	3 h	
Melt Temperature Range	200	O°C	
Characteristics			
Processing	Injection Moulding, Extrusion, Blow Moulding		
Delivery form	Pellets		





SANTOPRENE® 101-73E100

SANTOPRENE®

Additional information

Injection molding

Holding pressure should be about 50 to 75% of the actual injection pressure. A high screw RPM (100 to 200) is recommended. Back pressure is not always needed, however, a back pressure of 0.3 to 0.7 MPa may be used to ensure a homogeneous melt and maintain a consistent shot size. A higher back pressure is normally employed when using masterbatches.

Processing Notes

Processing Notes

Desiccant drying for 3 hours at $80 \degree C$ ($180 \degree F$) is recommended. Santoprene® TPV has a wide temperature processing window from 175 to 230 $\degree C$ (350 to 450 $\degree F$) and is incompatible with acetal and PVC.

Printed: 2025-05-30

Revised: 2025-04-21 Source: Celanese Materials Database

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 not intended for use in medical or dental implants. Regardless of any such product 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 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 the lowest that texist. 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 m

© 2025 Celanese or its affiliates. All rights reserved. Celanese®, registered C-ball design and all other trademarks identified herein with ®, TM, SM, unless otherwise noted, are trademarks of Celanese or its affiliates. Fortron is a registered trademark of Fortron Industries LLC.

Page: 2 of 2