



# SANTOPRENE® 6SD001A30 NAT SANTOPRENE®

Product information			
Resin Identification Part Marking Code	TPV >TPV<		ISO 1043 ISO 11469
Typical mechanical properties			
Tensile stress at 100% elongation, per Stress at 300% elongation Stress at break Elongation at break, perpendicular Shore A hardness, 15s Compression set, 70°C, 24h Tear strength, normal	1.5 1.9 422 28 27	MPa MPa % % kN/m	ISO 37 ISO 527-1/-2 or ISO 37 ISO 527-1/-2 or ISO 37 ISO 527-1/-2 or ISO 37 ISO 48-4 / ISO 868 ISO 815 ISO 34-1
Thermal properties			
Coefficient of linear thermal expansion	186 <sup>[1]</sup>	E-6/K	ISO 11359-1/-2
(CLTE), parallel Coefficient of linear thermal expansior normal [1]: Temperature range: -50°C to 120°C	n (CLTE), 329 <sup>[1]</sup>	E-6/K	ISO 11359-1/-2
Physical/Other properties			
Density	900	kg/m³	ISO 1183
Injection			
Drying Recommended Drying Temperature Drying Time, Dehumidified Dryer Processing Moisture Content Melt Temperature Optimum Min. melt temperature Max. melt temperature Mold Temperature Optimum Min. mould temperature Max. mould temperature	≥3 ≤0.08 185 180 190 30 20	% °C °C	
Characteristics			
Processing	Injection Moulding		
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 normal	y employea when using i	masierdatches.

**Processing Notes** 

Printed: 2025-05-30

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





# SANTOPRENE® 6SD001A30 NAT

## **Processing Notes**

refer to the injection molding guide.

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.

Santoprene® TPV has a relatively high melt viscosity at low shear rates. Viscosity decreases as the shear rate increases. Increasing temperature has little effect on TPV melt viscosity. Smaller gates and higher shear rates keep melt viscosity low and improve melt flow. Please also

### Storage

Santoprene must be stored indoors in the original, unopened and undamaged packaging, away from direct sunlight, moisture and heat.

#### Printed: 2025-05-30

Page: 2 of 2

#### 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 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 groucts. 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

© 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.