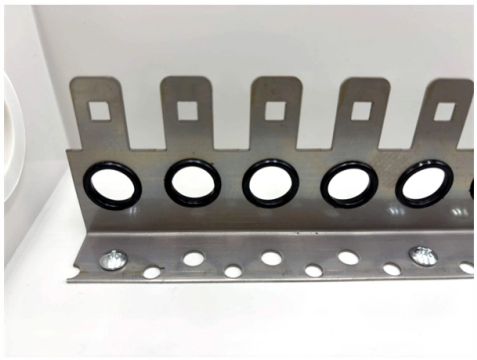
Budowa Silesia Photonics

Density of TPU material for optical cables



Overview

The Density of Thermoplastic Polyurethane (TPU), ranging between 1. 25 g/cm³, is critical in designing cables for various specialized applications. TPU's unique properties, such as flexibility, toughness, and chemical resistance, make it an ideal material for manufacturing durable. Elastollan® is the brand name for thermoplastic polyurethane (TPU) from BASF. It stands for maximum reliability, consistent product quality and cost efficiency. Elastollan® can be extruded into hoses, cable sheathing, belts, films and profiles, and can also be processed using blow molding and. rubber and plastic. The components made of the white material offer great resilience, good hydrolysis resistance, as well as high UV-stability. Technically, they are elastomers of linear segmented block copolymers composed of hard and soft segments.

Article Content

Material Datasheet

Materials of this polymer family have similar performance properties as elastomers, which means they are flexible at room temperature but remain dimensionally stable.

BASF Elastollan® (TPU)

Properties Density (0.4 – 0.9 g/L, depending on the quantity of blowing agent and geometry) Highly resistant to wear and hydrolysis Improved thermal insulation Unlimited coloring possibilities

TDS_TPU_Technical Data Sheet

DISCLAIMER: This material is a proprietary composion of TCPoly, Inc. U.S. and internaonal patents pending. The tesng an d product data provided in this data sheet are preliminary in nature accurate.

Density of Thermoplastic Polyurethane TPU Density

Density Range: 1.15–1.20 g/cm³. Applications: TPU is used in the outer jackets and buffer tubes of fiber optic cables, providing protection in outdoor, industrial, and underwater environments.

Thermoplastic Polyurethane (TPU) Product range

A premium TPU that not only provides a high degree of flexibility and resistance across a wide range of temperatures but is also capable of running the entire structural spectrum from hard and stiff - to soft …

TPU Material Properties Data Sheet | PDF | Chemical …

It lists the material''s physical properties including a density of 1.14 g/cm3, hardness of 90 Shore A, tensile strength of 36.4 MPa, and elongation at break of 498%. …

Thermoplastic Polyurethane (TPU) in Optical Fiber Cable Applications

Material test data such as provided in the earlier tables can provide a guideline for use. Indeed, fiber optical cables for tactical applications have been constructed similar to those in the …

PHYSICAL PROPERTIES

TPU Technical Data Sheet (TDS) rubber and plastic. It is a semi-flexible and chemical resistance filament with strong interlayer bonding. It also has good corrosion resistance to industrials IEMAI 3D …

Ultimaker TPU 95A Technical data sheet

Tensile properties (necking) before it breaks completely. When this is the case, both the y eld and break points will be reported. Typical materials that yield before breaking are materials with h only the ...

Material Datasheet

The properties of parts manufactured using additive manufacturing technology (e.g. laser sintering, stereolithography, Fused Deposition Modelling, 3D printing) are, due to their layer-by-layer ...

BASF Thermoplastic Polyurethane Elastomers (TPU), ...

The mass loss due to abrasion wear is measured, taking into account the density of the material and the sharpness of the test paper. The abrasion is given as the loss of volume in mm3.

Technical data sheet in accordance with ASTM Material TPU ...

on a limited number of tests on standard test pieces (2mm sheets). The data from finished parts can deviate from above values. depending on the manufactories process and the co. ponent geometry. ...

Contact Us

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