



# ELASTIC POWER

## FILM IN TPU

# TPU FILM

## PRODUCT CATALOGUE

The TPU is the link between the thermoplastic polymers and rubbers. With the firsts shares **the ability to thermoform**, due to heat, even after hardening; with the latter **the elasticity**. In other words, in the field of elastomers, it is the polymer with the best mechanical properties, excellent flexibility in the absence of plasticizers, even in the case of high hardness, as well as resistance to low temperatures, light, aging and bacterial attack.

The Industria Chimica Mediterranea transforms TPUs of different nature: aromatic **polyethers and polyesters**, for applications that need flexibility, strength and toughness, and **aliphatic**, where light stability, transparency and strong adhesion are required. The range of hardness varies from 60 to 98 Shore A, the thickness range goes from 100 to 1000 microns.

The manufacturing process of the Industria Chimica Mediterranea, which does not involve dissolution in solvent, but melting by heat, makes it **a material with a low environmental impact**, interesting for all those sectors where an extremely resistant, elastic and waterproof support is required .



# VISHNU

Medium hardness and modulus to balance elongation and abrasion resistance.

PHYSICAL PROPERTIES	VALUE	STANDARD
HARDNESS	<b>70 Shore A</b>	ASTM D 2240
ELONGATION AT BREAK	<b>550%</b>	ASTM D882
TENSILE STRENGTH	<b>35 MPa</b>	ASTM D882
ABRASION RESISTANCE	<b>35 mm<sup>3</sup></b>	ISO 20871



# KALI

Specific for those applications that require resistance to abrasion/tearing and elongation.

PHYSICAL PROPERTIES	VALUE	STANDARD
HARDNESS	<b>84 Shore A</b>	ASTM D 2240
ELONGATION AT BREAK	<b>500%</b>	ASTM D882
TENSILE STRENGTH	<b>38 MPa</b>	ASTM D882
ABRASION RESISTANCE	<b>50 mm<sup>3</sup></b>	ISO 20871



# GANESH

Elevated hardness and modulus for superior mechanical properties. High transparency, hydrolysis and UV stabilised.

PHYSICAL PROPERTIES	VALUE	STANDARD
HARDNESS	<b>91 Shore A</b>	ASTM D 2240
ELONGATION AT BREAK	<b>400%</b>	ASTM D882
TENSILE STRENGTH	<b>50 MPa</b>	ASTM D882
ABRASION RESISTANCE	<b>20 mm<sup>3</sup></b>	ISO 20871



# DEVI

Excellent low temperature flexibility, transparency, stability to hydrolysis and resistance to bacterial attack.

PHYSICAL PROPERTIES	VALUE	STANDARD
HARDNESS	<b>85 Shore A</b>	ASTM D 2240
ELONGATION AT BREAK	<b>500%</b>	ASTM D882
TENSILE STRENGTH	<b>40 MPa</b>	ASTM D882
ABRASION RESISTANCE	<b>30 mm<sup>3</sup></b>	ISO 20871



# SHIVA

Excellent low temperature flexibility, transparency, stability to hydrolysis and resistance to bacterial attack. Suitable for food contact.

PHYSICAL PROPERTIES	VALUE	STANDARD
HARDNESS	<b>91 Shore A</b>	ASTM D 2240
ELONGATION AT BREAK	<b>600%</b>	ASTM D882
TENSILE STRENGTH	<b>50 MPa</b>	ASTM D882
ABRASION RESISTANCE	<b>30 mm<sup>3</sup></b>	ISO 20871



# INDRA

Intermediate hardness. Excellent stability to hydrolysis and resistance to bacterial attack. high moisture vapour permeability.

PHYSICAL PROPERTIES	VALUE	STANDARD
HARDNESS	<b>85 Shore A</b>	ASTM D 2240
ELONGATION AT BREAK	<b>550%</b>	ASTM D882
TENSILE STRENGTH	<b>20 MPa</b>	ASTM D882
ABRASION RESISTANCE	<b>75 mm<sup>3</sup></b>	ISO 20871



**Industria Chimica Mediterranea**

Corso Protopisani 138 - 80146 Napoli - ITALIA

tel. +39.081.559.13.04

fax +39.081.752.33.80

p.iva 00272820630

[www.icmediterranea.com](http://www.icmediterranea.com)

[info@icmediterranea.com](mailto:info@icmediterranea.com)