

tefabloc® TP SD 310 40A

Thermoplastic Elastomer

Mitsubishi Chemical Performance Polymers, Inc.

Technical Data

Product Description

tefabloc® TP SD 310 40A is a Thermoplastic Elastomer (TPE) material. It is available in Europe or North America for injection molding.

Important attributes of tefabloc® TP SD 310 40A are:

- RoHS Compliant
- Chemical Resistant
- Food Contact Acceptable
- Good Aesthetics
- Good UV Resistance

Typical applications include:

- Consumer Goods
- Outdoor Applications
- Sealing Applications
- Sporting Goods

General

Features	• Acid Resistant • Base Resistant • Detergent Resistant	• Food Contact Acceptable • Good Chemical Resistance • Good Surface Finish	• Good UV Resistance • High Flow
Uses	• Outdoor Applications • Seals	• Sporting Goods • Toys	
Agency Ratings	• EN 71-3	• EU 2000/53/EC	
RoHS Compliance	• RoHS Compliant		
Appearance	• Opaque		
Forms	• Granules		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• >PP<		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.04 g/cm ³	1.04 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	32 g/10 min	32 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Abrasion	390 mm ³	390 mm ³	DIN 53516
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			ISO 37
20% Strain	87.0 psi	0.600 MPa	
100% Strain	160 psi	1.10 MPa	
Tensile Stress (Break)	435 psi	3.00 MPa	ISO 37
Tensile Elongation (Break)	760 %	760 %	ISO 37
Tear Strength ²	91 lbf/in	16 kN/m	ISO 34-1
Compression Set ³ (73°F (23°C), 72 hr)	25 %	25 %	ISO 815
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Shore Hardness			ISO 868
Shore A, 15 sec, Injection Molded	40	40	
Thermal	Nominal Value (English)	Nominal Value (SI)	
Service Temperature	-58 to 158 °F	-50 to 70 °C	
Aging	Nominal Value (English)	Nominal Value (SI)	
Resistance to Aging	257 °F	125 °C	



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Injection	Nominal Value (English)	Nominal Value (SI)
Rear Temperature	320 °F	160 °C
Middle Temperature	338 °F	170 °C
Front Temperature	356 °F	180 °C
Injection Rate	Moderate	Moderate
Screw Compression Ratio	2.5:1.0 to 3.0:1.0	2.5:1.0 to 3.0:1.0
Injection Notes		
Screw Speed: Medium		

