## ISOTHANE® 8101-B

Thermoplastic Polyurethane Elastomer

Great Eastern Resins Industrial Co Ltd (GRECO)

## Message:

General Information

ISOTHANE 8101-B product is a clear engineering thermoplastic polyurethane resin. It exhibits excellent bio-compatibility, hydrolytic resistance, fungus resistance, tensile and flexural strength, toughness, solvent resistance, abrasive resistance, good fatigue resistance, and maintenance of good physical properties under UV exposure. The product can be injection molded and extruded.

Features	High tensile strength		
	High strength		
	Antibacterial property		
	Solvent resistance		
	Good UV resistance		
	Good wear resistance		
	Fatigue resistance		
	Good toughness		
	Biocompatibility		
	Hydrolysis stability		
Agency Ratings	USP Class VI		
Appearance	Clear/transparent		
Processing Method	Extrusion		
	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (224°C/5.0 kg)	22	g/10 min	ASTM D1238
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	85		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2090	MPa	ASTM D638
Tensile Strength (Yield)	65.0	MPa	ASTM D638
Tensile Elongation (Break)			
	130	%	ASTM D638
Flexural Modulus	130 2260	% MPa	ASTM D638 ASTM D790
Flexural Modulus Flexural Strength			
	2260	MPa	ASTM D790
Flexural Strength	2260 75.0	MPa MPa	ASTM D790 ASTM D790
Flexural Strength Impact	2260 75.0 Nominal Value	MPa MPa Unit	ASTM D790 ASTM D790 Test Method
Flexural Strength Impact Notched Izod Impact <sup>1</sup> (23°C)	2260 75.0 Nominal Value 780	MPa MPa Unit J/m	ASTM D790 ASTM D790 Test Method ASTM D256

Drying Temperature	80.0 - 85.0	°C	
Suggested Max Moisture	< 0.020	%	
Rear Temperature	205	°C	
Middle Temperature	220	°C	
Front Temperature	220	°C	
Nozzle Temperature	230	°C	
Processing (Melt) Temp	220 - 240	°C	
Mold Temperature	65.0 - 80.0	°C	
Injection instructions			

Use low compression screw with L/D of 20 or more. Keep compression ratio to be between 2:1 and 2.5:1.

NOTE

1. 3.2mm notch depth

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

## Recommended distributors for this material

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533 Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

