

# Innoprene 1550N/B

Thermoplastic Vulcanizate  
Kumho Polychem Co., Ltd.

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## Technical Data

### Product Description

Innoprene 1550N/B is a Thermoplastic Vulcanizate (TPV) material. It is available in Asia Pacific, Europe, Latin America, or North America for extrusion or injection molding.

Important attributes of Innoprene 1550N/B are:

- Chemical Resistant
- Eco-Friendly/Green
- Fatigue Resistant
- Good Flexibility
- Heat Resistant

Typical applications include:

- Appliances
- Automotive
- Business/Office Goods
- Construction Applications
- Electrical/Electronic Applications

### General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• <a href="#">Technical Datasheet (English)</a>
Search for UL Yellow Card	• <a href="#">Kumho Polychem Co., Ltd.</a>
Availability	• Asia Pacific • Europe • Latin America • North America
Features	• Chemical Resistant • Fatigue Resistant • Good Electrical Properties • Good Flexibility • Good Tear Strength • Good Weather Resistance • High Heat Resistance • Low Compression Set • Ozone Resistant • Recyclable Material
Uses	• Appliances • Automotive Applications • Building Materials • Business Equipment • Electrical/Electronic Applications • Household Goods • Industrial Applications • Sporting Goods
Appearance	• Black • Natural Color
Forms	• Pellets
Processing Method	• Extrusion • Injection Molding

### Physical

	Nominal Value	Unit	Test Method
Density / Specific Gravity	--	0.952	ASTM D297
	77°F	0.950 g/cm <sup>3</sup>	ISO 1183



Elastomers	Nominal Value Unit	Test Method
Tensile Stress (100% Strain, 77°F)	284 psi	ASTM D412 ISO 37
Tensile Strength (Yield, 77°F)	853 psi	ASTM D412 ISO 37
Tensile Elongation (Break, 77°F)	620 %	ASTM D412 ISO 37
Tear Strength (77°F)	168 lbf/in	ASTM D624 ISO 34-1
Compression Set		
158°F, 22 hr	23 %	ASTM D395
248°F, 70 hr	43 %	ASTM D395
158°F, 22 hr <sup>3</sup>	23 %	ISO 815
248°F, 70 hr <sup>3</sup>	43 %	ISO 815
Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore A, 77°F)	55	ISO 868
Thermal	Nominal Value Unit	Test Method
Brittleness Temperature (Type B)	-86.8 °F	ISO 812
Aging	Nominal Value Unit	Test Method
Change in Tensile Strength in Air 302°F, 168 hr	-7.0 %	ASTM D412 ISO 188
Change in Ultimate Elongation in Air 302°F, 168 hr	-10 %	ASTM D412 ISO 188
Change in Shore Hardness in Air Shore A, 302°F, 168 hr	1.0	ISO 188
Change in Mass		ASTM D471
77°F, 168 hr, in Hydrochloric Acid, 10%	3.0 %	
77°F, 168 hr, in Sodium Hydroxide, 50%	1.0 %	
Additional Information	Nominal Value Unit	Test Method
UV Resistance - 1000hr	<1.0 E	SAE J1960
Injection	Nominal Value Unit	
Drying Temperature	185 °F	
Drying Time	3.0 hr	
Rear Temperature	320 to 356 °F	
Middle Temperature	356 to 392 °F	
Front Temperature	392 °F	
Nozzle Temperature	392 to 428 °F	
Processing (Melt) Temp	374 to 446 °F	
Mold Temperature	50 to 140 °F	
Injection Rate	Fast	
Injection Notes		
Cooling Time: 20-30 sec / 100-175g		
Extrusion	Nominal Value Unit	
Drying Temperature	185 °F	
Drying Time	3.0 hr	
Hopper Temperature	320 to 338 °F	
Cylinder Zone 1 Temp.	356 to 392 °F	



Extrusion	Nominal Value Unit
Cylinder Zone 2 Temp.	356 to 392 °F
Cylinder Zone 3 Temp.	356 to 392 °F
Adapter Temperature	392 °F
Melt Temperature	374 to 446 °F
Die Temperature	356 to 410 °F
Back Pressure	725 to 2900 psi

**Extrusion Notes**

Screen Pack: 20-60 mesh

**Notes**

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> Type A

