

## Product Data Sheet

KUMHO POLYCHEM

# Innoprene™ 1554B

Thermoplastic Rubber

### Product Description

Innoprene™ 1554B is thermoplastic rubber which incorporates the elasticity of thermoset rubber with the plasticity of thermoplastics. This grade is specially designed for medical applications and it can be formed by injection molding, extrusion for various applications such as gaskets, tubing and other articles.

### General

Applications	Medical – Syringe Tips, Seals and Gaskets Grips and Tubing	
Color	Black	
Form(s)	Pellets	
Processing	Injection Molding	Extrusion
Revision Date	2021-04-01	

Physical Properties	Unit	Typical Value	Test Method
Specific Gravity	–	0.95	ISO 1183
Hardness (Shore A, 15 sec.)	–	56	ISO 868
Tensile Strength	Kgf/cm <sup>2</sup>	68	ISO 37
Elongation	%	670	ISO 37
Modulus at 100%	Kgf/cm <sup>2</sup>	23	ISO 37
Tear Strength	Kgf/cm	21	ISO 34-1
Compression set (125°C, 70 hrs)	%	35	ISO 815

Thermal Property	Unit	Typical Value	Test Method
Brittleness Temperature	°C	–60	ISO 812

Aging Properties (150°C, 168 hrs)	Unit	Typical Value	Test Method
Change in Shore Hardness	–	+1	ISO 188
Change in Tensile Strength	%	–12	ISO 188
Change in Elongation	%	–10	ISO 188

## Injection Molding Conditions

Drying Temperature	85 °c
Drying Time	3.0 hrs
Rear Temperature	175 °c
Middle Temperature	180 ~ 190 °c
Front Temperature	195 °c
Nozzle Temperature	200 °c
Processing(Melt) Temperature	190 ~ 200 °c
Mold Temperature	10 ~ 60 °c
Cooling Time	20 ~ 30 sec / 100 ~175 g
Injection Rate	Fast

## Extrusion Conditions

Drying Temperature	85 °c
Drying Time	3.0 hrs
Feed Temperature	175 °c
Zone 1 ~ Zone 3 Temperature	180 ~ 190 °c
Head Temperature	195 °c
Die Temperature	200 °c
Processing(Melt) Temperature	190 ~ 200 °c
Screen Pack	20 ~ 60 mesh
Back Pressure	5.0 to 20.0 Mpa

The property values shown are measured on injection molded specimens. They are based on a limited number of tests. Therefore, should not be interpreted as product specifications. These values may shift slightly as additional data are accumulated.

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