

SABIC Innovative Plastics NORYL HNA055 PPE+HIPS

Category : Polymer , Thermoplastic , Polyphenylene Ether/PPO , Polystyrene (PS)

Material Notes:

>PPE+PS-HI< Autoclavable engineering thermoplastic. Biocompatible per ISO10993 (color dependent).

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-NORYL-HNA055-PPEHIPS.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.08 g/cc	1.08 g/cc	ASTM D792
Density	1.08 g/cc	0.0390 lb/in ³	ISO 1183
Moisture Absorption	0.0600 %	0.0600 %	23 ^o C / 50% RH; ISO 62
Water Absorption at Saturation	0.23 %	0.23 %	ISO 62
Linear Mold Shrinkage, Flow	0.0060 - 0.0080 cm/cm @Thickness 3.20 mm	0.0060 - 0.0080 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	6.2 g/10 min @Load 5.00 kg, Temperature 300 ^o C	6.2 g/10 min @Load 11.0 lb, Temperature 572 ^o F	ASTM D1238
Melt Index of Compound	5.0 g/10 min @Load 5.00 kg, Temperature 300 ^o C	5.0 g/10 min @Load 11.0 lb, Temperature 572 ^o F	MVR [cm ³ /10 min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	55.0 MPa	7980 psi	Type I, 50 mm/min; ASTM D638
	57.0 MPa	8270 psi	50 mm/min; ISO 527
Tensile Strength, Yield	61.0 MPa	8850 psi	50 mm/min; ISO 527
	67.0 MPa	9720 psi	Type I, 50 mm/min; ASTM D638
Elongation at Break	12.6 %	12.6 %	50 mm/min; ISO 527
	16.3 %	16.3 %	Type I, 50 mm/min; ASTM D638
Elongation at Yield	3.8 %	3.8 %	50 mm/min; ISO 527
	4.8 %	4.8 %	Type I, 50 mm/min; ASTM D638
Tensile Modulus	2.40 GPa	348 ksi	1 mm/min; ISO 527
	3.24 GPa	470 ksi	5 mm/min; ASTM D638

Mechanical Properties	Metric ^{Pa}	English ^{psi}	Comments
	107 MPa	15500 psi	2 mm/min; ISO 178
Flexural Modulus	2.49 GPa	361 ksi	2 mm/min; ISO 178
	2.54 GPa	368 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	2.93 J/cm	5.49 ft-lb/in	ASTM D256
	1.44 J/cm	2.70 ft-lb/in	ASTM D256
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
Izod Impact, Notched (ISO)	24.0 kJ/mÂ²	11.4 ft-lb/inÂ²	80*10*4; ISO 180/1A
	14.0 kJ/mÂ²	6.66 ft-lb/inÂ²	80*10*4; ISO 180/1A
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
Charpy Impact, Notched	2.70 J/cmÂ²	12.8 ft-lb/inÂ²	Edgew 80*10*4 sp=62mm; ISO 179/1eA
Dart Drop, Total Energy	54.0 J	39.8 ft-lb	ASTM D3763
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	86.6 Âµm/m-Â°C	48.1 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
	86.6 Âµm/m-Â°C	48.1 Âµin/in-Â°F	ISO 11359-2
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
CTE, linear, Transverse to Flow	92.5 Âµm/m-Â°C	51.4 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
	92.5 Âµm/m-Â°C	51.4 Âµin/in-Â°F	ISO 11359-2
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
Deflection Temperature at 1.8 MPa (264 psi)	147 Â°C	297 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/ Af
	147 Â°C	297 Â°F	unannealed; ASTM D648
	@Thickness 3.20 mm	@Thickness 0.126 in	

Vicat Softening Point Thermal Properties	168 Â°C Metric	334 Â°F English	Rate B/50; ASTM D1525 Comments
	168 Â°C	334 Â°F	Rate B/50; ISO 306
	169 Â°C	336 Â°F	Rate B/120; ISO 306

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China