Evonik Corporation Vestamid® E62-S3 Heat & Light Stabilized Nylon 12/PEBA Elastomer

Category : Polymer , Thermoplastic , Elastomer, TPE , Nylon , Nylon 12 , Polyether Block Amide (PEBA)

Material Notes:

Description: Compared to other contending thermoplastic elastomers, PA 12 elastomers are distinguished by the following properties:They have low density.They are highly resistant to chemicals and solvents.They are easy to process and color and are easy to overmold.They can be decorated easily by means of heat transfer printing.They have excellent impact strength at low temperatures.Their hardness and flexibility can be varied over a wide range.They have high elasticity and good recovery.Their mechanical properties are only slightly temperature-dependent.They are free of volatile or migrating plasticizers.Applications: alpine ski boots, noiseless gears, conveyor beltsInformation provided by degussa.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Evonik-Corporation-Vestamid-E62-S3-Heat-Light-Stabilized-Nylon-12PEBA-Elastomer.php

Physical Properties	Metric	English	Comments
Density	1.03 g/cc	0.0372 lb/in³	ISO 1183
Water Absorption at Saturation	1.1 %	1.1 %	ISO 62
Viscosity Test	190 cm³/g	190 cm³/g	Viscosity Number; ISO 307
Linear Mold Shrinkage	0.0060 - 0.011 cm/cm @Thickness 3.00 mm	0.0060 - 0.011 in/in @Thickness 0.118 in	sheet with film gate at rim, mold temperature 80°C
Linear Mold Shrinkage, Transverse	0.0090 - 0.014 cm/cm @Thickness 3.00 mm	0.0090 - 0.014 in/in @Thickness 0.118 in	sheet with film gate at rim, mold temperature 80°C

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	62	62	ISO 868
Tensile Strength at Break	42.0 MPa	6090 psi	ISO 527-1, ISO 527-2
Elongation at Break	>= 200 %	>= 200 %	ISO 527-1, ISO 527-2
Tensile Modulus	0.370 GPa	53.7 ksi	ISO 527-1, ISO 527-2
50% Modulus	0.0230 GPa	3.34 ksi	ISO 527-1, ISO 527-2
Charpy Impact Unnotched	NB @Temperature -30.0 °C	NB @Temperature -22.0 °F	ISO 179/1eU
	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	ISO 179/1eU
	0.800 J/cm²	3.81 ft-lb/in²	

Mechanical Properties	Metric	English	Comments
Charpy Impact, Notched	@Temperature -30.0 °C	@Temperature -22.0 °F	ISO 179/1eA
	12.0 J/cm² @Temperature 23.0 °C	57.1 ft-lb/in² @Temperature 73.4 °F	Partial Break; ISO 179/1eA
Tensile Creep Modulus, 1000 hours	200 MPa	29000 psi	ISO 899-1

Thermal Properties	Metric	English	Comments
CTE, linear	200 µm/m-°C @Temperature 23.0 - 55.0 °C	111 µin/in-°F @Temperature 73.4 - 131 °F	Longitudinal; ISO 11359
CTE, linear, Transverse to Flow	200 µm/m-°C @Temperature 23.0 - 55.0 °C	111 µin/in-°F @Temperature 73.4 - 131 °F	ISO 11359
Deflection Temperature at 0.46 MPa (66 psi)	100 °C	212 °F	ISO 75-2
Deflection Temperature at 1.8 MPa (264 psi)	45.0 °C	113 °F	ISO 75-1
Vicat Softening Point	110 °C	230 °F	50N; ISO 306
	165 °C	329 °F	10N; ISO 306
Flammability, UL94	HB @Thickness 1.60 mm	HB @Thickness 0.0630 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+12 ohm-cm	1.00e+12 ohm-cm	Spec.; IEC 60093
Surface Resistance	1.00e+14 ohm	1.00e+14 ohm	Spec.; IEC 60093
Dielectric Constant	4.0 @Frequency 1e+6 Hz	4.0 @Frequency 1e+6 Hz	IEC 60250
	9.0 @Frequency 100 Hz	9.0 @Frequency 100 Hz	IEC 60250
Dielectric Strength	39.0 kV/mm	991 kV/in	K20/P50; IEC 60243-1
Dissipation Factor	0.10 @Frequency 100 Hz	0.10 @Frequency 100 Hz	IEC 60250
	0.12 @Frequency 1e+6 Hz	0.12 @Frequency 1e+6 Hz	IEC 60250

Electrical Properties	Metric	English	Comments
Comparative Tracking Index	600 V	600 V	Test Solution A; IEC 60112

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