Technical Data Sheet

Schulamid 612 HV H3 BLK968001

Polyamide 612

Product Description
Polyamide 612, high viscosity, heat stabilized for extrusion molding

Processing Method	Extrusion
Resin ID	PA612

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.05	g/cm³	ISO 1183
Mechanical			
Tensile Stress at Yield			
(Type 1A, 50 mm/min)	63.0	MPa	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	49.0	MPa	ISO 527-2
Nominal Tensile Strain at Break, - Conditioned	>50	%	ISO 527-2
Flexural Modulus, (23 °C, 2.0 mm/min)	2700	MPa	ISO 178
Tensile Strain at Yield			
(Type 1A, 50 mm/min)	4.5	%	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	20	%	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	2200	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	1400	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min, 3.5%)	85.0	MPa	ISO 178
Flexural Strength, (23 °C)	95.0	MPa	ASTM D790
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	10	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	No Break		ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	180	°C	ISO 306
(A (10N), 50 °C/h)	210	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	140	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	60.0	°C	ISO 75-2/A
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302

Injection Parameters	Nominal Value	Units
Drying Time	3.0 to 4.0	hr
Drying Temperature	80	°C
Suggested Max Moisture	0.040 to 0.10	%
Processing (Melt) Temp	230 to 270	°C
Mold Temperature	50 to 90	°C