Technical Data Sheet

Polyman ASA E/MI 0515 H UV GRY68535

Acrylonitrile Styrene Acrylate

Product Description

Impact and outdoor resistant ASA with increased heat resistance for extrusion and injection moulding

Processing Method	Extrusion; Injection Molding
Attribute	Good Impact Resistance; High Heat Resistance

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	5.0	cm³/10 min	ISO 1133
Density, (Method A)	1.07	g/cm³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	48.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	3.0	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2300	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	11	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	No Break		ISO 179
Notched Izod Impact (Area), (23 °C)	13.0	kJ/m²	ASTM D256
Hardness			
Ball Indentation Hardness, (H 358/30)	96.0	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	103	°C	ISO 306
(A (10N), 120 °C/h)	117	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	104	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	84.0	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	600	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302

Additional Information			
Water Absorption 23C/50RH	1.2	%	ISO 62
UL Information			
Flammability Classification			
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	80	°C
Processing (Melt) Temp	240 to 270	°C
Mold Temperature	40 to 80	°C