Technical Data Sheet

POLYMAN® (ASA) E/MI 1010 UV

Acrylonitrile Styrene Acrylate
Engineering Plastics

Product Description
High flow ASA grade with enhanced UV stability.

General		
Features	• High Flow	• UV Resistant
Processing Method	• Extrusion	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.08 g/cm³	1.08 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	14 cm³/10min	14 cm³/10min	ISO 1133
Molding Shrinkage	0.40 to 0.70 %	0.40 to 0.70 %	ISO 294-4
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	435000 psi	3000 MPa	ISO 527-2/1A/1
Tensile Stress			ISO 527-2/1A/50
Yield	7250 psi	50.0 MPa	
Break	6530 psi	45.0 MPa	
Tensile Strain (Yield)	3.5 %	3.5 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	5.0 %	5.0 %	ISO 527-2/1A/50
Flexural Modulus [1]	377000 psi	2600 MPa	ISO 178
Flexural Stress [1] (4.8% Strain)	11600 psi	80.0 MPa	ISO 178
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	0.95 ft·lb/in²	2.0 kJ/m²	
73°F (23°C)	3.8 ft·lb/in²	8.0 kJ/m²	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 358/30)	13900 psi	96.0 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/Af
264 psi (1.8 MPa), Unannealed	194 °F	90.0 °C	
Vicat Softening Temperature	212 °F	100 °C	ISO 306/B50
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 60093
Volume Resistivity	> 1.0E+13 ohms·m	> 1.0E+13 ohms·m	IEC 62631-3-1
Comparative Tracking Index	600 V	600 V	IEC 60112
Flammability	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Burning Rate			
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	

Additional Information

1.) Not for use in food contact applications
2.) Not for use in medical or pharmaceutical applications

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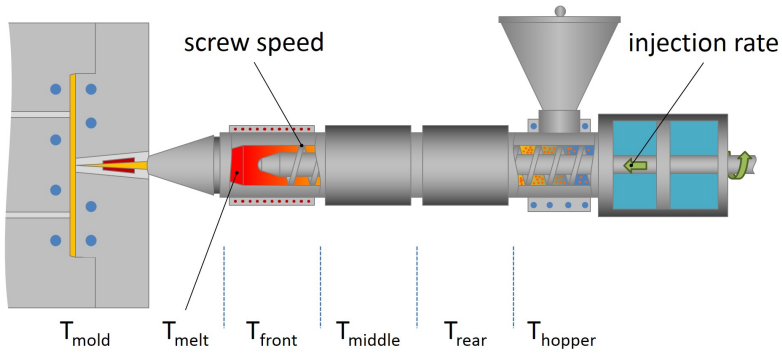

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Regrind	30 %	30 %
Processing (Melt) Temp	464 to 518 °F	240 to 270 °C
Mold Temperature	104 to 176 °F	40 to 80 °C

Injection Notes

Material in metallic (silver) colors should be plasticised and injected at medium to low speeds to keep the metallic look. Gate should ideally be a film gate with the same wall thickness as the part.

Notes

[1] 0.079 in/min (2.0 mm/min)

Notes

These are typical property values not to be construed as specification limits.