

Technical Data Sheet

Polyman ABS K2086 CR UV WHI80730



Acrylonitrile Butadiene Styrene

Product Description

Crack resistant ABS

Processing Method Injection Molding

Attribute Crack Resistant

Resin ID ABS

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	16	cm ³ /10 min	ISO 1133
Density, (Method A)	1.10	g/cm ³	ISO 1183
Mechanical			
Flexural Strain at Flexural Strength	4.4	%	ISO 178
Tensile Stress at Yield, (Type 1A, 50 mm/min)	47.6	MPa	ISO 527-2
Flexural Modulus	2550	MPa	ISO 178
Tensile Strain at Yield, (Type 1A, 50 mm/min)	2.5	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2640	MPa	ISO 527-1
Flexural Stress	68.7	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	16	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	9.2	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	97.0	°C	ISO 306
(A (10N), 50 °C/h)	106	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	94.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	82.0	°C	ISO 75-2/A
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	FMVSS 302
(2.00 mm)	<100	mm/min	ISO 3795