SABIC® PMMA IN20HR

POLYMETHYL METHACRYLATE

DESCRIPTION

SABIC® PMMA IN20HR is a PMMA grade with good heat resistance property suitable for extrusion and injection molding applications targeting unexposed applications to ultraviolet radiation. The grade is available in pellet form.

TYPICAL PROPERTY VALUES

Revision 20190131

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL PROPERTIES (1)			
Specific Gravity	1.19	g/cm³	ISO 1183
Melt Flow Rate 230°C/3.16 kg	2.0	g/10 min	ISO 1133
Water Absorption (24hr)	0.3	%	ISO 62
MECHANICAL PROPERTIES (1)			
Tensile Strength	77	MPa	ISO 527
Elongation	6	%	ISO 527
Modulus Of elasticity (1 mm/min)	3.3	GPa	ISO 527
Flexural Strength	140	MPa	ISO 178
Flexural modulus (2 mm/min)	3.3	GPa	ISO 178
Charpy Impact strength (un notched)	20	kJ/m²	ISO 179
Charpy Impact strength (Notched) 23°C	1.4	kJ/m²	ISO 179
Rockwell Hardness (M-scale)	101	-	ISO 2039
OPTICAL PROPERTIES (1)			
Total Light Transmittance	93	%	ISO 13468
Haze	0.3	%	ISO 14782
Refractive Index	1.49	-	ISO 489
THERMAL PROPERTIES (1)			
Coefficient of Linear Expansion (-30°C to 30°C)	6e-5	1/°C	ASTM D 696
Thermal Conductivity	0.2	W/(m*°C)	ASTM C177
Deflection temperature under load DTUL (@1.8 MPa)	100	°C	ISO 75-1&2
Vicat Softening Temperature (B50)	107	°C	ISO 306

(1) Typical values; not to be construed as specification limits

CHARACTERISTICS

SABIC® PMMA IN20HR has the following:

- Good chemical resistance
- Good impact resistance
- Good toughness
- High gloss

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STORAGE AND HANDLING

Handle in an area equipped with local or general ventilation. Provide facilities for washing eyes and body in case of emergency near the handling area. As preventive measure, make sure all equipment and devices are properly grounded. Store at a location away from heat and fire source and an area not exposed to sunlight. Store in an area where no water leakage occurs and the humidity is low.

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