

PERFORMANCE CHEMICALS

# SABIC™ PMMA 20HR

Polymethyl Methacrylate Acrylic

## PRODUCT DESCRIPTION:

SABIC™ PMMA 20 HR is a PMMA grade with good heat resistance property suitable for extrusion and injection molding applications. The grade is available in pellet form.

## CHARACTERISTICS:

SABIC™ PMMA 20 HR has the following:

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

## TYPICAL DATA:

PHYSICAL PROPERTIES	Unit	Typical Value <sup>(1)</sup>	Test Method
Specific gravity	g/cm <sup>3</sup>	1.19	ISO 1183
Total light transmittance	%	93	ISO 13468
Haze	%	0.3	ISO 14782
Refractive index	-	1.49	ASTM D 542/ISO489
Water adsorption	%	0.3	ISO 62
THERMAL PROPERTIES	Unit	Typical Value <sup>(1)</sup>	Test Method
Specific heat	J/(g°C)	1.5	JIS K 7123
Coefficient of linear expansion	J/°C	6x10 <sup>-5</sup>	ASTM D 696
Coefficient of thermal conductivity	W/(m°C)	0.2	ASTM C 177
Deflection temperature under load	°C	100	ISO 75
Vicat softening temperature	°C	107	ISO 306
Melt flow rate	g/10min	2.0	ISO 1133
MECHANICAL PROPERTIES	Unit	Typical Value <sup>(1)</sup>	Test Method
Tensile Strength	MPa	77	ISO 527
Tensile Elongation	%	6	ISO 527
Modulus Of elasticity	GPa	3.3	ISO 527
Flexural Strength	MPa	140	ISO 178
Flexural Modulus	GPa	3.3	ISO 178
Charpy Impact strength (un notched)	KJ/m <sup>2</sup>	20	ISO 179
Charpy Impact strength (Notched)		1.4	ISO 179
Rockwell Hardness	KJ/m <sup>2</sup>	101	ISO 2039
ELECTRICAL PROPERTIES	Unit	Typical Value <sup>(1)</sup>	Test Method
Surface Resistivity	Ω	>10 <sup>16</sup>	JIS K 6911
Volume Resistivity	Ωm	>10 <sup>13</sup>	JIS K 6911
Dielectric strength	MV/m	20	JIS K 6911
Dielectric constant	-	3.70	JIS K 6911
Power factor	-	0.050	JIS K 6911

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

## PACKING & STORAGE:

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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