

# SABIC® PMMA 20HR

## POLYMETHYL METHACRYLATE ACRYLIC

### DESCRIPTION

SABIC® PMMA 20HR is a PMMA grade with good heat resistance property suitable for extrusion and injection

### TYPICAL PROPERTY VALUES

Revision 20170706

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL PROPERTIES			
Specific Gravity	1.19	g/cm <sup>3</sup>	ISO 1183
Water Adsorption	0.3	%	ISO 62
POLYMER PROPERTIES			
Melt Flow Rate			
at 230°C and 3.80 kg	2.0	g/10 min	ISO 1133
MECHANICAL PROPERTIES			
Tensile Strength at Break	77	MPa	ASTM D638
Tensile Elongation at Break	6	%	ASTM D638
Modulus of elasticity	3.3	MPa	SABIC method
Flexural Strength	140	MPa	ASTM D790
Flexural modulus	3.3	MPa	ISO 178/1A
Charpy Impact Strength			
unnotched	20	kJ/m <sup>2</sup>	ISO 179
notched	1.4	kJ/m <sup>2</sup>	ISO 179
Rockwell Hardness	101	-	ISO 2039
OPTICAL PROPERTIES			
Haze	0.3	%	ASTM D1003
Total Light Transmittance	93	%	ISO 13468
Refractive Index	1.49	-	ASTM D542
THERMAL PROPERTIES			

Specific Heat	1.5	J/g-°C	JIS K 7123
Coefficient of Linear Expansion	6x10 <sup>-5</sup>	J/°C	ASTM D696
Coefficient of Thermal Conductivity	0.2	W/m-°C	ASTM C177
Heat deflection temperature			
at 1.8 MPa	100	°C	ISO 75
Vicat softening temperature			

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CHEMISTRY THAT MATTERS™

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
-	107	°C	ISO 306
<b>ELECTRICAL PROPERTIES</b>			
Surface Resistivity	>10 <sup>16</sup>	Ω	JIS K 6911
Volume resistivity	>10 <sup>13</sup>	Ohm.cm	SABIC method
Dielectric Strength	20	kV/mm	ASTM D150
Dielectric Constant	3.70	-	ASTM D150
Power Factor	0.050	-	JIS K 6911

## CHARACTERISTICS

SABIC® PMMA 20HR has the following:

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

## 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.

## DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

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