

# SABIC® PMMA 140HF

POLYMETHYL METHACRYLATE

## DESCRIPTION

SABIC® PMMA 140HF is a standard easy flowing grade for Injection molding applications. The grade is available in pellet form.

## TYPICAL PROPERTY VALUES

Revision 20220720

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>PHYSICAL PROPERTIES <sup>(1)</sup></b>			
Specific Gravity	1.19	g/cm <sup>3</sup>	ISO 1183
Melt Flow Rate, 230°C/3.8 kg	14.0	g/10 min	ISO 1133
Water Absorption (24hr)	0.3	%	ISO 62
<b>MECHANICAL PROPERTIES <sup>(1)</sup></b>			
Tensile Strength	66	MPa	ISO 527
Elongation	4	%	ISO 527
Modulus Of elasticity (1 mm/min)	3.3	GPa	ISO 527
Flexural Strength	120	MPa	ISO 178
Flexural modulus (2 mm/min)	3.3	GPa	ISO 178
Charpy Impact strength (un notched)	18	kJ/m <sup>2</sup>	ISO 179
Charpy Impact strength (Notched) 23°C	1.3	kJ/m <sup>2</sup>	ISO 179
Rockwell Hardness (M-scale)	86	-	ISO 2039
<b>OPTICAL PROPERTIES <sup>(1)</sup></b>			
Total Light Transmittance	93	%	ISO 13468
Haze	0.3	%	ISO 14782
Refractive Index	1.49	-	ISO 489
<b>THERMAL PROPERTIES <sup>(1)</sup></b>			
Coefficient of Linear Expansion (-30°C to 30°C)	6e-5	1/°C	ASTM D696
Thermal Conductivity	0.2	W/(m°C)	ASTM C177
Deflection temperature under load DTUL (@1.8 MPa)	84	°C	ISO 75-1&2
Vicat Softening Temperature (B50)	89	°C	ISO 306

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

## CHARACTERISTICS

SABIC® PMMA 140HF 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.

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CHEMISTRY THAT MATTERS™

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