



SABIC® PMMA 20HR

POLYMETHYL METHACRYLATE

DESCRIPTION

SABIC® PMMA 20HR is a General purpose grade suitable for injection molded housewares, automotive tail lights, optical lens as well as for extrusion sheets, pipes, and rods. This grade is listed in "AMECA" list for three years.

TYPICAL PROPERTY VALUES

Revision 20240424

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL PROPERTIES ⁽¹⁾			
Specific Gravity	1.19	g/cm ³	ISO 1183
Melt Flow Rate, 230°C/3.8 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/m ²	ISO 179
Charpy Impact strength (Notched) 23°C	1.4	kJ/m ²	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 D696
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 20HR has the following:

- 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.

© 2024 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™



DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

