

SABIC® PP COMPOUND H1020

FLAME RETARDANT GLASS FIBER REINFORCED POLYPROPYLENE

DESCRIPTION

SABIC® PP compound H1020 is a good flow, halogen free flame retardant, homopolymer with 20% glass fiber, developed for Automotive and electric injection molded applications. This material has been designed to combine a good performance profile with good processing.

SABIC® PP compound H1020 should be dried at 100°C for 2 hours before the injection molding.

IMDS ID:1043303341
UL Yellow Card: E111275

TYPICAL PROPERTY VALUES

Revision 20230801

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 230 °C and 2.16 kg	10	dg/min	ISO 1133
Density ⁽¹⁾	1180	kg/m ³	ISO 1183
Filler content	20	%	SABIC method
Mould shrinkage ⁽²⁾			
24 hours after injection moulding	0.8	%	SABIC method
MECHANICAL PROPERTIES ^{(1) (3)}			
Tensile			
Tensile modulus	6350	MPa	ISO 527/1A
stress at yield	No Yield	MPa	ISO 527/1A
stress at break	85	MPa	ISO 527/1A
strain at break	3	%	ISO 527/1A
Flexural test			
Flexural modulus	6300	MPa	ISO 178/1A
Izod impact notched ^{(1) (3)}			
at 23 °C	7	kJ/m ²	ISO 180/1A
at 0 °C	6.0	kJ/m ²	ISO 180/1A
at -20 °C	6.5	kJ/m ²	ISO 180/1A
THERMAL PROPERTIES			
Heat deflection temperature			
at 1.8 MPa (HDT/A) ⁽¹⁾	144	°C	ISO 75
Coeff. of linear thermal expansion			
-30 °C to 100°C	50	µm/mK	ISO 11359-2
FLAMMABILITY PROPERTIES			
UL94			
Lowest thickness VO	1.5	mm	UL 94
GWFI			
at 1.6 mm	960	°C	IEC 60695-2-13
GWIT			
at 0.8 mm	825	°C	IEC 60695-2-13



- (1) Injection molded sample ISO527-1A
- (2) Injection molded plaque 65x65x3.2mm
- (3) N.B.: No Break

STORAGE AND HANDLING

Avoid prolonged storage in open sunlight, high temperatures (<50 °C) and/or high humidity as this could well speed up alteration and consequently loss of quality of the material and/or its packaging. Keep material completely dry for good processing.

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