

GELOY™ XTWE480 resin

Acrylonitrile Styrene Acrylate

SABIC Innovative Plastics Asia Pacific

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

Anti-scratch GELOY grade with excellent weatherability, high flow, and good surface quality. XTWE480 is available in various colours.

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• SABIC Innovative Plastics Asia Pacific • GELOY™
Availability	• Asia Pacific
Features	• Good Surface Finish • High Flow • Good Weather Resistance • Scratch Resistant
Appearance	• Colors Available
Processing Method	• Profile Extrusion

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.15 g/cm ³	ASTM D792 ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	38 g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.20 mm)	0.30 to 0.60 %	Internal Method

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ³	2470 MPa	ASTM D638
--	2300 MPa	ISO 527-2/1
Tensile Strength		
Yield ⁴	50.0 MPa	ASTM D638
Yield	50.0 MPa	ISO 527-2/50
Break ⁴	36.0 MPa	ASTM D638
Break	38.0 MPa	ISO 527-2/50
Tensile Elongation		
Yield ⁴	3.0 %	ASTM D638
Yield	3.0 %	ISO 527-2/50
Break ⁴	21 %	ASTM D638
Break	25 %	ISO 527-2/50
Flexural Modulus		
50.0 mm Span ⁵	2060 MPa	ASTM D790
-- ⁶	2410 MPa	ISO 178
Flexural Strength		
-- ^{6, 7}	70.0 MPa	ISO 178
Yield, 50.0 mm Span ⁵	70.0 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
-30°C	27 J/m	ASTM D256
23°C	49 J/m	ASTM D256
-30°C ⁸	3.0 kJ/m ²	ISO 180/1A
23°C ⁸	5.0 kJ/m ²	ISO 180/1A
Instrumented Dart Impact		ASTM D3763
23°C, Total Energy	6.50 J	

Hardness	Nominal Value Unit	Test Method
Pencil Hardness ⁹	F	ASTM D3363



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Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
1.8 MPa, Unannealed, 6.40 mm	73.0 °C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ¹⁰	73.0 °C	ISO 75-2/Af
Vicat Softening Temperature		
--	78.0 °C	ASTM D1525 ¹¹
--	79.0 °C	ISO 306/B50
CLTE		ISO 11359-2
Flow : -40 to 40°C	8.1E-5 cm/cm/°C	
Transverse : -40 to 40°C	8.8E-5 cm/cm/°C	

Extrusion	Nominal Value Unit
Drying Temperature	75.0 to 85.0 °C
Drying Time	4.0 hr
Suggested Max Moisture	0.020 %
Hopper Temperature	60.0 to 80.0 °C
Cylinder Zone 1 Temp.	205 to 220 °C
Cylinder Zone 2 Temp.	210 to 225 °C
Cylinder Zone 3 Temp.	215 to 225 °C
Cylinder Zone 4 Temp.	215 to 225 °C
Adapter Temperature	200 to 225 °C
Melt Temperature	200 to 230 °C
Die Temperature	210 to 225 °C
Calibration Temp, First	50.0 to 70.0 °C

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ 50 mm/min

⁴ Type I, 50 mm/min

⁵ 1.3 mm/min

⁶ 2.0 mm/min

⁷ Yield

⁸ 80*10*4

⁹ 1 kgf

¹⁰ 80*10*4 mm

¹¹ Rate B (120°C/h), Loading 2 (50 N)

