

GELOY* XP4034 Resin

SABIC Innovative Plastics Europe - Acrylonitrile Styrene Acrylate

General Information

Product Description

GELOY XP4034 is a high heat modified ASA+PC alloy. It is a weatherable, injection mouldable product which is available in a wide range of colours. The product is recommended for automotive unpainted exterior applications.

General

Material Status	• Commercial: Active
Availability	• Europe
Additive	• Heat Stabilizer
Features	• Good Weather Resistance • Heat Stabilized
Uses	• Automotive Exterior Parts
RoHS Compliance	• RoHS Compliant
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

ASTM and ISO Properties ¹

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.15 g/cm ³	1.15 g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	0.915 in ³ /10min	15.0 cm ³ /10min	ISO 1133
Molding Shrinkage (Flow)	0.0040 to 0.0060 in/in	0.40 to 0.60 %	ASTM D955
Water Absorption (73 °F (23 °C), Saturation)	0.70 %	0.70 %	ISO 62
Water Absorption 73 °F (23 °C), Equilibrium, 50 % RH	0.25 %	0.25 %	ISO 62
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	341000 psi	2350 MPa	ISO 527-2/1
Tensile Stress (Yield)	7980 psi	55.0 MPa	ISO 527-2/50
Tensile Stress (Break)	6530 psi	45.0 MPa	ISO 527-2/50
Tensile Strain (Yield)	4.5 %	4.5 %	ISO 527-2/50
Tensile Strain (Break)	35 %	35 %	ISO 527-2/50
Flexural Modulus ²	363000 psi	2500 MPa	ISO 178
Flexural Strength ^{2, 3}	12300 psi	85.0 MPa	ISO 178
Taber Abrasion Resistance ⁴ (1000 Cycles)	120 mg	120 mg	ASTM D1044
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact Strength			ISO 180/1A
-22 °F (-30 °C)	3.81 ft·lb/in ²	8.00 kJ/m ²	
73 °F (23 °C)	15.7 ft·lb/in ²	33.0 kJ/m ²	



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Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness - H 358/30	14200 psi	98.0 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature ⁵			ISO 75-2/Be
66 psi (0.45 MPa), Unannealed	234 °F	112 °C	
Heat Deflection Temperature ⁵			ISO 75-2/Ae
264 psi (1.8 MPa), Unannealed	212 °F	100 °C	
Vicat Softening Temperature			
--	225 °F	107 °C	ISO 306/B50
--	228 °F	109 °C	ISO 306/B120

Processing Information		
Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	194 to 221 °F	90.0 to 105 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.040 %	0.040 %
Processing (Melt) Temp	500 to 527 °F	260 to 275 °C
Mold Temperature	122 to 158 °F	50.0 to 70.0 °C

Notes

¹ Typical properties: these are not to be construed as specifications.

² 0.079 in/min (2.0 mm/min)

³ Yield

⁴ 1000 g, CS-17 Wheel

⁵ 120*10*4 mm, 3.94 in (100 mm)

