

Geloy* Resin XTPM309E

Europe-Africa-Middle East: COMMERCIAL

XTPM309E is a high heat resistant ASA+PC. It shows high impact retention, which can be positioned for various outdoor and indoor applications requiring superior heat aging properties and colour stability. Typical properties measured on natural material.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	59	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	62	MPa	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	55	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	67	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	5.4	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	>100	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	5.2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	>100	%	ASTM D 638
Tensile Modulus, 5 mm/min	2310	MPa	ASTM D 638
Tensile Stress, yield, 5 mm/min	55	MPa	ISO 527
Tensile Stress, break, 5 mm/min	61	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	58	MPa	ISO 527
Tensile Stress, break, 50 mm/min	64	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5.1	%	ISO 527
Tensile Strain, break, 5 mm/min	>100	%	ISO 527
Tensile Strain, yield, 50 mm/min	5.3	%	ISO 527
Tensile Strain, break, 50 mm/min	>100	%	ISO 527
Tensile Modulus, 1 mm/min	2310	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	85	MPa	ISO 178
Flexural Modulus, 2 mm/min	2250	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	675	J/m	ASTM D 256
Izod Impact, notched, 0°C	720	J/m	ASTM D 256
Izod Impact, notched, -10°C	570	J/m	ASTM D 256
Izod Impact, notched, -20°C	470	J/m	ASTM D 256
Izod Impact, notched, -30°C	85	J/m	ASTM D 256
Multiaxial Impact	103	J	ISO 6603
Izod Impact, notched 80*10*4 +23°C	56	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	45	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -10°C	26	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -20°C	20	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	14	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	60	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	24	kJ/m ²	ISO 179/1eA
THERMAL	Value	Unit	Standard
CTE, -40°C to 40°C, flow	8.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	8.E-05	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASS	-	IEC 60695-10-2

Ball Pressure Test, approximate maximum	130	°C	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	143	°C	ISO 306
Vicat Softening Temp, Rate B/50	131	°C	ISO 306
Vicat Softening Temp, Rate B/120	132	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	132	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	113	°C	ISO 75/Ae
PHYSICAL	Value	Unit	Standard
Mold Shrinkage on Tensile Bar, flow (2)	0.4 - 0.6	%	SABIC Method
Density	1.16	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.6	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 220°C/10.0 kg	4	cm ³ /10 min	ISO 1133
Melt Volume Rate, MVR at 240°C/5.0 kg	6	cm ³ /10 min	ISO 1133
Melt Volume Rate, MVR at 260°C/5.0 kg	17	cm ³ /10 min	ISO 1133
ELECTRICAL	Value	Unit	Standard
Volume Resistivity	4.4E+15	Ohm-cm	ASTM D 257
Surface Resistivity	1.3E+16	Ohm	ASTM D 257
Dielectric Strength, in oil, 1.6 mm	27.3	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	0.012	-	ASTM D 150
FLAME CHARACTERISTICS	Value	Unit	Standard
Glow Wire Flammability Index 750°C, passes at	3.2	mm	IEC 60695-2-12

Source GMD, last updated:01/03/2005

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	100 - 110	°C
Drying Time	2 - 4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	260 - 290	°C
Nozzle Temperature	240 - 280	°C
Front - Zone 3 Temperature	250 - 290	°C
Middle - Zone 2 Temperature	250 - 290	°C
Rear - Zone 1 Temperature	230 - 260	°C
Hopper Temperature	60 - 80	°C
Mold Temperature	60 - 90	°C

Source GMD, last updated:01/03/2005

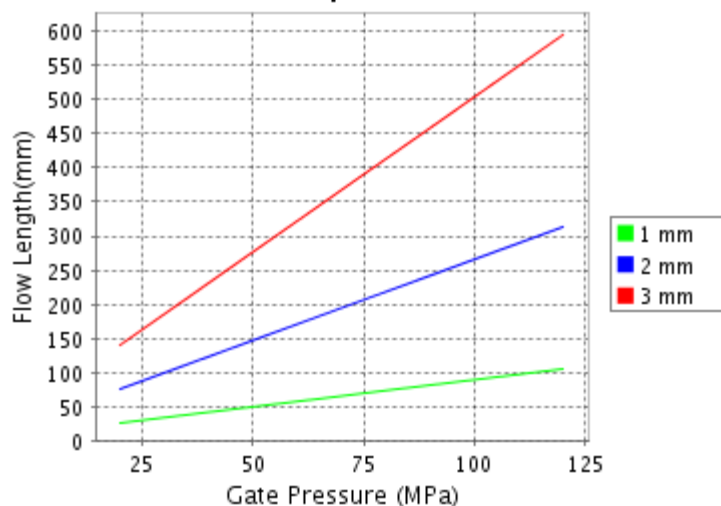
CALCULATED FLOW LENGTH INDICATION

Moldflow® Radial Flow Analysis

Geloy® FXW710SK

Melt Temperature : 250°C

Mold Temperature : 60°C



Note: Technical support is recommended if Gate Pressure is greater than 80 MPa. Contact your local representative.

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THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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