

## Geloy\* Resin XTPM302

## Europe-Africa-Middle East: COMMERCIAL

XTPM302 is a general purpose ASA/PC injection moulding grade, available in various colors. Typical properties measured on natural material.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	55	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	44	MPa	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	51	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	47	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	3.7	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	95	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3.6	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	>100	%	ASTM D 638
Tensile Modulus, 5 mm/min	2370	MPa	ASTM D 638
Tensile Stress, yield, 5 mm/min	49	MPa	ISO 527
Tensile Stress, break, 5 mm/min	43	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	54	MPa	ISO 527
Tensile Stress, break, 50 mm/min	43	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.3	%	ISO 527
Tensile Strain, break, 5 mm/min	80	%	ISO 527
Tensile Strain, yield, 50 mm/min	3.7	%	ISO 527
Tensile Strain, break, 50 mm/min	55	%	ISO 527
Tensile Modulus, 1 mm/min	2370	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	80	MPa	ISO 178
Flexural Modulus, 2 mm/min	2300	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	485	J/m	ASTM D 256
Izod Impact, notched, 0°C	285	J/m	ASTM D 256
Izod Impact, notched, -10°C	175	J/m	ASTM D 256
Izod Impact, notched, -20°C	140	J/m	ASTM D 256
Izod Impact, notched, -30°C	105	J/m	ASTM D 256
Multiaxial Impact	94	J	ISO 6603
Izod Impact, notched 80*10*4 +23°C	28	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	15	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -10°C	11	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -20°C	7	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	6	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	38	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	8	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m <sup>2</sup>	ISO 179/1eU
THERMAL	Value	Unit	Standard
CTE, -40°C to 40°C, flow	9.5E-05	1/°C	ISO 11359-2

CTE, -40°C to 40°C, xflow	9.5E-05	1/°C	ISO 11359-2
Ball Pressure Test, approximate maximum	100	°C	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	116	°C	ISO 306
Vicat Softening Temp, Rate B/50	103	°C	ISO 306
Vicat Softening Temp, Rate B/120	104	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	103	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	87	°C	ISO 75/Ae
<b>PHYSICAL</b>	<b>Value</b>	<b>Unit</b>	<b>Standard</b>
Mold Shrinkage on Tensile Bar, flow (2)	0.4 - 0.6	%	SABIC Method
Density	1.1	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/sat)	0.8	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.3	%	ISO 62
Melt Volume Rate, MVR at 220°C/10.0 kg	10	cm <sup>3</sup> /10 min	ISO 1133
Melt Volume Rate, MVR at 240°C/5.0 kg	10	cm <sup>3</sup> /10 min	ISO 1133
Melt Volume Rate, MVR at 260°C/5.0 kg	27	cm <sup>3</sup> /10 min	ISO 1133
<b>ELECTRICAL</b>	<b>Value</b>	<b>Unit</b>	<b>Standard</b>
Volume Resistivity	2.5E+15	Ohm-cm	ASTM D 257
Surface Resistivity	1.9E+16	Ohm	ASTM D 257
Dielectric Strength, in oil, 1.6 mm	27.8	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	0.0175	-	ASTM D 150

Source GMD, last updated:01/03/2005

## Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	90 - 100	°C
Drying Time	2 - 4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	250 - 280	°C
Nozzle Temperature	230 - 270	°C
Front - Zone 3 Temperature	240 - 280	°C
Middle - Zone 2 Temperature	230 - 270	°C
Rear - Zone 1 Temperature	220 - 260	°C
Hopper Temperature	60 - 80	°C
Mold Temperature	50 - 80	°C

Source GMD, last updated:01/03/2005

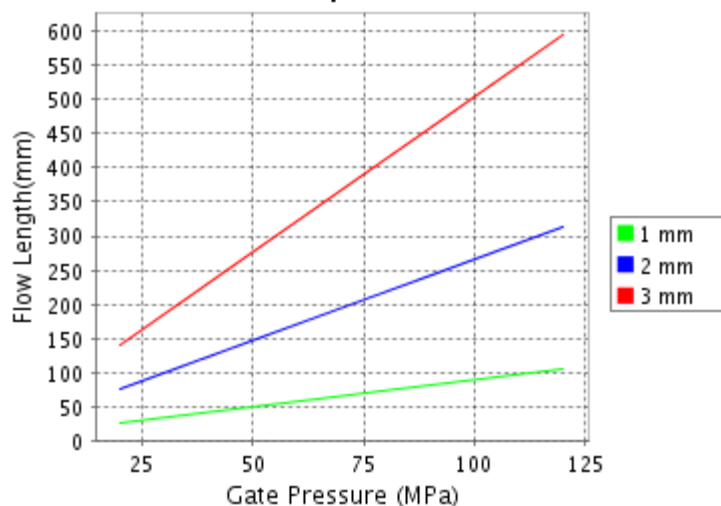
## CALCULATED FLOW LENGTH INDICATION

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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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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