

SABIC Innovative Plastics Gelay XTPM302 ASA+PC (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , ASA Polymer , Polycarbonate (PC) , Polycarbonate/ASA Alloy, Unreinforced

Material Notes:

XTPM302 is a general purpose ASA/PC injection moulding grade, available in various colors. Typical properties measured on natural material. This data was supplied by SABIC-IP for the Europe-Africa-Middle East region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Gelay-XTPM302-ASAPC-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Density	1.10 g/cc	0.0397 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.30 %	0.30 %	23°C / 50% RH; ISO 62
Water Absorption at Saturation	0.80 % @Temperature 23.0 °C	0.80 % @Temperature 73.4 °F	ISO 62
Linear Mold Shrinkage, Flow	0.0040 - 0.0060 cm/cm	0.0040 - 0.0060 in/in	on tensile bar; SABIC Method
Melt Flow	10 g/10 min @Load 10.0 kg, Temperature 220 °C	10 g/10 min @Load 22.0 lb, Temperature 428 °F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	10 g/10 min @Load 5.00 kg, Temperature 240 °C	10 g/10 min @Load 11.0 lb, Temperature 464 °F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	27 g/10 min @Load 5.00 kg, Temperature 260 °C	27 g/10 min @Load 11.0 lb, Temperature 500 °F	[cm ³ /10 min] Melt Volume Rate; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	43.0 MPa	6240 psi	50 mm/min; ISO 527
	43.0 MPa	6240 psi	5 mm/min; ISO 527
	44.0 MPa	6380 psi	Type I, 50 mm/min; ASTM D 638
	47.0 MPa	6820 psi	Type I, 5 mm/min; ASTM D 638
Tensile Strength, Yield	49.0 MPa	7110 psi	5 mm/min; ISO 527
	51.0 MPa	7400 psi	Type I, 5 mm/min; ASTM D 638
	54.0 MPa	7830 psi	50 mm/min; ISO 527

Mechanical Properties	55.0 MPa Metric	7980 psi English	Type I, 50 mm/min; ASTM D 638 Comments
Elongation at Break	55 %	55 %	50 mm/min; ISO 527
	80 %	80 %	5 mm/min; ISO 527
	95 %	95 %	Type I, 50 mm/min; ASTM D 638
	>= 100 %	>= 100 %	Type I, 5 mm/min; ASTM D 638
Elongation at Yield	3.3 %	3.3 %	5 mm/min; ISO 527
	3.6 %	3.6 %	Type I, 5 mm/min; ASTM D 638
	3.7 %	3.7 %	Type I, 50 mm/min; ASTM D 638
	3.7 %	3.7 %	50 mm/min; ISO 527
Tensile Modulus	2.37 GPa	344 ksi	1 mm/min; ISO 527
	2.37 GPa	344 ksi	5 mm/min; ASTM D 638
Flexural Yield Strength	80.0 MPa	11600 psi	2 mm/min; ISO 178
Flexural Modulus	2.30 GPa	334 ksi	2 mm/min; ISO 178
Izod Impact, Notched	1.05 J/cm @Temperature -30.0 °C	1.97 ft-lb/in @Temperature -22.0 °F	ASTM D 256
	1.40 J/cm @Temperature -20.0 °C	2.62 ft-lb/in @Temperature -4.00 °F	ASTM D 256
	1.75 J/cm @Temperature -10.0 °C	3.28 ft-lb/in @Temperature 14.0 °F	ASTM D 256
	2.85 J/cm @Temperature 0.000 °C	5.34 ft-lb/in @Temperature 32.0 °F	ASTM D 256
	4.85 J/cm @Temperature 23.0 °C	9.09 ft-lb/in @Temperature 73.4 °F	ASTM D 256
Izod Impact, Notched (ISO)	6.00 kJ/m² @Temperature -30.0 °C	2.86 ft-lb/in² @Temperature -22.0 °F	80*10*4; ISO 180/1A
	7.00 kJ/m² @Temperature -20.0 °C	3.33 ft-lb/in² @Temperature -4.00 °F	80*10*4; ISO 180/1A
	11.0 kJ/m² @Temperature -10.0 °C	5.23 ft-lb/in² @Temperature 14.0 °F	80*10*4; ISO 180/1A

Mechanical Properties	Metric	English	Comments
	@Temperature 0.000 °C	@Temperature 32.0 °F	
	28.0 kJ/m ²	13.3 ft-lb/in ²	80*10*4; ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	NB	NB	Edgew 80*10*4 sp=62mm; ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	NB	NB	Edgew 80*10*4 sp=62mm; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact, Notched	0.800 J/cm ²	3.81 ft-lb/in ²	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	3.80 J/cm ²	18.1 ft-lb/in ²	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Impact Test	94.0 J	69.3 ft-lb	Multiaxial Impact; ISO 6603

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	95.0 µm/m-°C	52.8 µin/in-°F	ISO 11359-2
	@Temperature -40.0 - 40.0 °C	@Temperature -40.0 - 104 °F	
CTE, linear, Transverse to Flow	95.0 µm/m-°C	52.8 µin/in-°F	ISO 11359-2
	@Temperature -40.0 - 40.0 °C	@Temperature -40.0 - 104 °F	
Hot Ball Pressure Test	<= 100 °C	<= 212 °F	IEC 60695-10-2
Deflection Temperature at 0.46 MPa (66 psi)	103 °C	217 °F	Edgew 120*10*4 sp=100mm; ISO 75/Be
Deflection Temperature at 1.8 MPa (264 psi)	87.0 °C	189 °F	Edgew 120*10*4 sp=100mm; ISO 75/Ae
Vicat Softening Point	103 °C	217 °F	Rate B/50; ISO 306
	104 °C	219 °F	Rate B/120; ISO 306
	116 °C	241 °F	Rate A/50; ISO 306

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.50e+15 ohm-cm	2.50e+15 ohm-cm	ASTM D 257
Surface Resistance	1.90e+16 ohm	1.90e+16 ohm	ASTM D 257
	27.8 kV/mm	706 kV/in	

Dielectric Strength Electrical Properties	Metric @ Thickness 1.60 mm	English @ Thickness 0.0630 in	in oil: ASTM D 149 Comments
Dissipation Factor	0.0175 @Frequency 1.00e+6 Hz	0.0175 @Frequency 1.00e+6 Hz	ASTM D 150

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China