GELOY™ RESIN XTPMFR10

REGION ASIA

DESCRIPTION

PC/ASA, chlorine and bromine free.

TYPICAL PROPERTY VALUES

Revision 20220504

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	65	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	47	MPa	ASTM D638
Tensile Stress, yld, Type I, 5 mm/min	60	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	49	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	4	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	31	%	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	4	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	58	%	ASTM D638
Tensile Modulus, 50 mm/min	2680	MPa	ASTM D638
Tensile Stress, yield, 5 mm/min	61	MPa	ISO 527
Tensile Stress, break, 5 mm/min	46	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	66	MPa	ISO 527
Tensile Stress, break, 50 mm/min	47	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4	%	ISO 527
Tensile Strain, break, 5 mm/min	50	%	ISO 527
Tensile Strain, yield, 50 mm/min	4	%	ISO 527
Tensile Strain, break, 50 mm/min	21	%	ISO 527
Tensile Modulus, 1 mm/min	2680	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	97	MPa	ISO 178
Flexural Modulus, 2 mm/min	2720	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	330	J/m	ASTM D256
Izod Impact, notched, -30°C	90	J/m	ASTM D256
Multiaxial Impact	85	J	ISO 6603
Izod Impact, notched 80*10*4 +23°C	13	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	12	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	13	kJ/m²	ISO 179/1eA
THERMAL			
CTE, -40°C to 40°C, flow	6.3E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.3E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	96	°C	ISO 306
Vicat Softening Temp, Rate B/120	98	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	90	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	81	°C	ISO 75/Af
PHYSICAL			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.18	g/cm³	ISO 1183
Melt Volume Rate, MVR at 260°C/2.16 kg	30	cm³/10 min	ISO 1133
Melt Viscosity, 260°C, 1500 sec-1	105	Pa-s	ISO 11443
FLAME CHARACTERISTICS			
UL Yellow Card Link	XTPMFR10	-	-
UL Compliant, 94V-0 Flame Class Rating	1	mm	UL 94 by SABIC-IP
INJECTION MOLDING			
Drying Temperature	80 – 90	°C	
Drying Time	2 – 4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	230 – 270	°C	
Nozzle Temperature	220 – 260	°C	
Front - Zone 3 Temperature	230 – 270	°C	
Middle - Zone 2 Temperature	220 – 260	°C	
Rear - Zone 1 Temperature	200 – 230	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	50 – 70	°C	

DISCLAIMER