

GELOY™ RESIN CR7020

REGION EUROPE

DESCRIPTION

ASA. Profile and sheet. Excellent weatherability, good flow/aesthetics and high impact.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Taber Abrasion, CS-17, 1 kg	155	mg/1000cy	SABIC method
Tensile Stress, yield, 5 mm/min	30	MPa	ISO 527
Tensile Stress, break, 5 mm/min	25	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	35	MPa	ISO 527
Tensile Stress, break, 50 mm/min	30	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.5	%	ISO 527
Tensile Strain, break, 5 mm/min	15	%	ISO 527
Tensile Strain, yield, 50 mm/min	2.7	%	ISO 527
Tensile Strain, break, 50 mm/min	10	%	ISO 527
Tensile Modulus, 1 mm/min	1900	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	50	MPa	ISO 178
Flexural Modulus, 2 mm/min	1900	MPa	ISO 178
Hardness, H358/30	70	MPa	ISO 2039-1
Hardness, Rockwell R	95	-	ISO 2039-2
IMPACT			
Izod Impact, notched 80*10*4 +23°C	15	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	6	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	14	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	6	kJ/m ²	ISO 179/1eA
THERMAL			
Thermal Conductivity	0.21	W/m-°C	ISO 8302
CTE, 23°C to 60°C, flow	9.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.E-04	1/°C	ISO 11359-2
Ball Pressure Test, 75°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	85	°C	ISO 306
Vicat Softening Temp, Rate B/120	90	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	85	°C	ISO 75/Be



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HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	75	°C	ISO 75/Ae
Relative Temp Index, Elec	50	°C	UL 746B
Relative Temp Index, Mech w/impact	50	°C	UL 746B
Relative Temp Index, Mech w/o impact	50	°C	UL 746B
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow (2) (5)	0.4 – 0.7	%	SABIC method
Density	1.06	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.55	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 220°C/10.0 kg	7	cm ³ /10 min	ISO 1133
Melt Volume Rate, MVR at 260°C/5.0 kg	8	cm ³ /10 min	ISO 1133
ELECTRICAL			
Volume Resistivity	> 1.E+14	Ohm-cm	IEC 60093
Surface Resistivity, ROA	> 1.E+15	Ohm	IEC 60093
Dielectric Strength, in oil, 3.2 mm	16	kV/mm	IEC 60243-1
Relative Permittivity, 1 MHz	3.2	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.15	-	IEC 60250
Dissipation Factor, 1 MHz	0.026	-	IEC 60250
Comparative Tracking Index	600	V	IEC 60112
Comparative Tracking Index, M	600	V	IEC 60112
Relative Permittivity, 50/60 Hz	5.2	-	IEC 60250
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1	mm	UL 94
UL Recognized, 94HB Flame Class Rating 2nd value (3)	3	mm	UL 94
Glow Wire Flammability Index 750°C, passes at	3.2	mm	IEC 60695-2-12
Oxygen Index (LOI)	19	%	ISO 4589
PROFILE EXTRUSION			
Drying Temperature	85 – 95	°C	
Drying Time	2 – 4	hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	210 – 240	°C	
Barrel - Zone 1 Temperature	180 – 210	°C	
Barrel - Zone 2 Temperature	190 – 220	°C	
Barrel - Zone 3 Temperature	200 – 230	°C	
Barrel - Zone 4 Temperature	200 – 230	°C	
Hopper Temperature	60 – 80	°C	
Adapter Temperature	200 – 230	°C	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Die Temperature	200 – 230	°C	
Calibrator Temperature	50 – 70	°C	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

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