



GELOY™ Resin EXGY0071
Americas: COMMERCIAL

Next generation Gelay XTW ASA for high heat exterior applications. Outstanding weatherability and toughness. Metallic sparkle VisualFx.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	460	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	370	kgf/cm ²	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	430	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	360	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	2.7	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	17	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	18	%	ASTM D 638
Tensile Modulus, 5 mm/min	25000	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	750	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	26200	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 50 mm/min	45	MPa	ISO 527
Tensile Stress, break, 50 mm/min	36	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	2.8	%	ISO 527
Tensile Strain, break, 50 mm/min	24	%	ISO 527
Tensile Modulus, 1 mm/min	2450	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	64	MPa	ISO 178
Flexural Modulus, 2 mm/min	2500	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	14	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	2	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	183	cm-kgf	ASTM D 3763



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
IMPACT			
Izod Impact, notched 80*10*4 +23°C	10	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	2	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	8	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	98	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	97	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	84	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.4E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.4E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	8.3E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	9.4E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	95	°C	ISO 306
Vicat Softening Temp, Rate B/120	99	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	84	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.11	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.4 - 0.7	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm (5)	0.4 - 0.7	%	SABIC Method
Melt Flow Rate, 220°C/10.0 kgf	12	g/10 min	ASTM D 1238
Density	1.11	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.5	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 260°C/5.0 kg	13	cm ³ /10 min	ISO 1133



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	85 - 90	°C
Drying Time	4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.04	%
Melt Temperature	240 - 270	°C
Nozzle Temperature	220 - 255	°C
Front - Zone 3 Temperature	230 - 260	°C
Middle - Zone 2 Temperature	220 - 255	°C
Rear - Zone 1 Temperature	215 - 250	°C
Mold Temperature	60 - 85	°C
Back Pressure	0.3 - 1	MPa
Screw Speed	30 - 80	rpm
Shot to Cylinder Size	40 - 80	%
Vent Depth	0.038 - 0.076	mm