

GELOYTM RESIN FXW710SK

REGION AMERICAS

DESCRIPTION

General purpose injection molding ASA with Visual Fx sparkle effect.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	38	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	30	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	2.5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	4	%	ASTM D 638
Tensile Modulus, 5 mm/min	1790	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	55	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1790	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	38	MPa	ISO 527
Tensile Stress, break, 50 mm/min	30	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	2.5	%	ISO 527
Tensile Strain, break, 50 mm/min	4	%	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, Rockwell R	95	-	ISO 2039-2
IMPACT			
Izod Impact, notched, 23°C	134	J/m	ASTM D 256
Izod Impact, notched, -30°C	56	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	17	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	12	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	5	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	12	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	4	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	99	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	77	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.64E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.18E-05	1/°C	ASTM E 831
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	86	°C	ISO 306
Vicat Softening Temp, Rate B/120	91	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	88	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	75	°C	ISO 75/Ae

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Specific Gravity	1.06	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 220°C/10.0 kgf	7	g/10 min	ASTM D 1238
Density	1.09	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
INJECTION MOLDING			
Drying Temperature	75 – 85	°C	
Drying Time	2 – 4	hrs	
Maximum Moisture Content	0.04	%	
Melt Temperature	240 – 260	°C	
Nozzle Temperature	220 – 250	°C	
Front - Zone 3 Temperature	230 – 260	°C	
Middle - Zone 2 Temperature	220 – 250	°C	
Rear - Zone 1 Temperature	210 – 240	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	40 – 70	°C	