SABIC Innovative Plastics™

Geloy* Resin XTWE290

Americas: COMMERCIAL

Excellent weathering. Coextrusion capstock grade asa.Thermoformable.Spas and outdoor vehicles.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	55	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	36	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	3	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	15	%	ASTM D 638
Tensile Modulus, 5 mm/min	3000	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	80	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2650	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	53	MPa	ISO 527
Tensile Stress, break, 50 mm/min	35	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	2.8	%	ISO 527
Tensile Strain, break, 50 mm/min	52	%	ISO 527
Tensile Modulus, 1 mm/min	2900	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	74	MPa	ISO 178
Flexural Modulus, 2 mm/min	2600	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	95	J/m	ASTM D 256
Izod Impact, notched, -30°C	35	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	30	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	2	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	7	kJ/m²	ISO 179/1eA
THERMAL	Value	Unit	Standard
Vicat Softening Temp, Rate B/50	89	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	76	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.5E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.5E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	8.5E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	9.5E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	88	°C	ISO 306
Vicat Softening Temp, Rate B/120	90	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	78	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.1	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.35 - 0.7	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm	0.35 - 0.7	%	SABIC Method
Melt Flow Rate, 200°C/3.8 kgf	0.5	g/10 min	ASTM D 1238
Density	1.13	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	0.8	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62

Melt Volume Rate, MVR at 220°C/5.0 kg	2	cm³/10 min	ISO 1133

Source GMD, last updated:10/11/2004

Processing

• Barrel temperatures should be banked TO 150°C (300°F)

Parameter Sheet Extrusion	Value	Unit
Drying Temperature	80 - 90	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	12	hrs
Minimum Moisture Content	0.04	%
Melt Temperature	220 - 245	°C
Barrel - Zone 1 Temperature	180 - 225	°C
Barrel - Zone 2 Temperature	190 - 230	°C
Barrel - Zone 3 Temperature	205 - 240	°C
Barrel - Zone 4 Temperature	210 - 245	°C
Adapter Temperature	210 - 245	°C
Die Temperature	210 - 245	°C
Roll Stack Temp - Top	70 - 100	°C
Roll Stack Temp - Middle	70 - 95	°C
Roll Stack Temp - Bottom	65 - 90	°C

Source GMD, last updated:10/11/2004

• Purge using HIPS or Ultra HDPE.

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.