

Xenoy* Resin CL101

Europe-Africa-Middle East: COMMERCIAL

XENOY CL101 has been specially developed to obtain outstanding low temperature impact strength and resistance to occasional solvent and gasoline contact. CL101 is particularly suited for exterior automotive body components which will be painted off-line.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Taber Abrasion, CS-17, 1 kg	30	mg/1000cy	SABIC Method
Tensile Stress, yield, 50 mm/min	50	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5	%	ISO 527
Tensile Strain, break, 50 mm/min	150	%	ISO 527
Tensile Modulus, 1 mm/min	2100	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	80	MPa	ISO 178
Flexural Modulus, 2 mm/min	2000	MPa	ISO 178
Hardness, H358/30	82	MPa	ISO 2039-1
Hardness, Rockwell L	89	-	ISO 2039-2
IMPACT	Value	Unit	Standard
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	50	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	30	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	25	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	55	kJ/m ²	ISO 179/1eA
Charpy Impact, notched, 23°C	30	kJ/m ²	ISO 179/2C
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	40	kJ/m ²	ISO 179/1eA
Charpy Impact, notched, -20°C	25	kJ/m ²	ISO 179/2C
Charpy Impact, notched, -30°C	20	kJ/m ²	ISO 179/2C
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m ²	ISO 179/1eU
THERMAL	Value	Unit	Standard
Thermal Conductivity	0.18	W/m·°C	ISO 8302
CTE, 23°C to 80°C, flow	9.E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	9.5E-05	1/°C	ISO 11359-2
Ball Pressure Test, 75°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	155	°C	ISO 306
Vicat Softening Temp, Rate B/50	121	°C	ISO 306
Vicat Softening Temp, Rate B/120	125	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	105	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	83	°C	ISO 75/Ae
PHYSICAL	Value	Unit	Standard
Mold Shrinkage on Tensile Bar, flow (2)	0.7 - 1.1	%	SABIC Method
Mold Shrinkage on Tensile Bar, xflow (2)	0.7 - 1.1	%	SABIC Method
Density	1.22	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.5	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62

Melt Volume Rate, MVR at 250°C/5.0 kg	13	cm ³ /10 min	ISO 1133
ELECTRICAL			
	Value	Unit	Standard
Volume Resistivity	>1.E+14	Ohm-cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ohm	IEC 60093
Dielectric Strength, shorttime, 1.0mm	18	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 3.2 mm	17	kV/mm	IEC 60243-1
Relative Permittivity, 50/60 Hz	3.3	-	IEC 60250
Relative Permittivity, 1 MHz	3.3	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.002	-	IEC 60250
Dissipation Factor, 1 MHz	0.02	-	IEC 60250
FLAME CHARACTERISTICS			
	Value	Unit	Standard
UL Compliant, 94HB Flame Class Rating (3)(4)	1.5	mm	UL 94 by GE

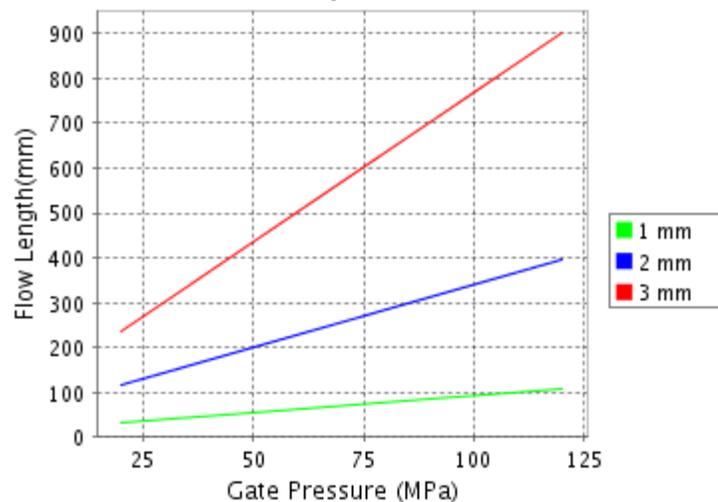
Source GMD, last updated:12/14/1999

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	90 - 100	°C
Drying Time	2 - 4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	255 - 270	°C
Nozzle Temperature	250 - 265	°C
Front - Zone 3 Temperature	250 - 270	°C
Middle - Zone 2 Temperature	240 - 265	°C
Rear - Zone 1 Temperature	230 - 250	°C
Hopper Temperature	40 - 60	°C
Mold Temperature	60 - 80	°C

Source GMD, last updated:12/14/1999

CALCULATED FLOW LENGTH INDICATION
Moldflow® Radial Flow Analysis
Valox® V3001MC
Melt Temperature : 260°C
Mold Temperature : 70°C



Note: Technical support is recommended if Gate Pressure is greater than 80 MPa. Contact your local representative.
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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.

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