XENOY™ Resin CL101 - Europe

SABIC - Polycarbonate + PBT

Tuesday, December 9, 2025

General Information

Product Description

Xenoy CL101 is an unfilled, impact modified PC/PBT blend with excellent solvent resistance and low-temperature ductility. It has a proven track record in off-line painted exterior automotive applications. ISO1043: PC+PBT-I.

General			
Material Status	• Commercial: Active		
Availability	• Europe		
Uses	• Appliances • Automotive Applications	• Automotive Exterior Parts • Electrical/Electronic Applications	• Recreational Vehicle Applications • Water Management
Automotive Specifications	• FORD WSK-M4D762-A2 Color: Black	• GM QK 000194 Type B Color: 78211 Black	• IMDS ID 3252197 Color: 78211 Black
Also Available In	• Asia Pacific	• Latin America	• North America

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.22	g/cm³	ASTM D792
Density	1.22	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	14	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (250°C/5.0 kg)	13	cm³/10min	ISO 1133
Molding Shrinkage [2]			Internal Method
Across Flow	0.70 to 1.1	%	
Flow	0.70 to 1.1	%	
Water Absorption (Saturation, 23°C)	0.50	%	ISO 62
Water Absorption (Equilibrium, 23°C, 50% RH)	0.15	%	ISO 62

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus [3]	2050	MPa	ASTM D638
Tensile Modulus	2050	MPa	ISO 527-1/1
Tensile Strength [4] (Yield)	53.0	MPa	ASTM D638
Tensile Stress (Yield)	52.0	MPa	ISO 527-2/50
Tensile Strength [4] (Break)	49.0	MPa	ASTM D638
Tensile Stress (Break)	44.0	MPa	ISO 527-2/50
Tensile Elongation [4] (Yield)	4.5	%	ASTM D638
Tensile Strain (Yield)	4.5	%	ISO 527-2/50
Tensile Elongation [4] (Break)	100	%	ASTM D638
Tensile Strain (Break)	100	%	ISO 527-2/50
Flexural Modulus [5] (50.0 mm Span)	2000	MPa	ASTM D790
Flexural Modulus [6]	2000	MPa	ISO 178
Flexural Stress [6, 7]	75.0	MPa	ISO 178
Flexural Strength [5] (Yield, 50.0 mm Span)	75.0	MPa	ASTM D790
Taber Abrasion Resistance			Internal Method
1000 Cycles, 1000 g, CS-17 Wheel	30.0	mg	

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Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			
-30°C [8]	25	kJ/m²	ISO 179/1eA
-30°C	20	kJ/m²	ISO 179/2C
-20°C	25	kJ/m²	ISO 179/2C
23°C [8]	58	kJ/m²	ISO 179/1eA
23°C	30	kJ/m²	ISO 179/2C
Charpy Unnotched Impact Strength [8]			ISO 179/1eU
-30°C	No Break		
23°C	No Break		
Notched Izod Impact			ASTM D256
-30°C	450	J/m	
0°C	600	J/m	
23°C	630	J/m	
Notched Izod Impact Strength [9]			ISO 180/1A
-40°C	25	kJ/m²	
-30°C	35	kJ/m²	
23°C	50	kJ/m²	
Unnotched Izod Impact Strength [9]			ISO 180/1U
-30°C	No Break		
23°C	No Break		

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (L-Scale)	89		ISO 2039-2
Ball Indentation Hardness (H 358/30)	82.0	MPa	ISO 2039-1

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 4.00 mm, 100 mm Span [10]	105	°C	ISO 75-2/Be
0.45 MPa, Unannealed, 4.00 mm, 64.0 mm Span [9]	105	°C	ISO 75-2/Bf
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed, 3.20 mm	83.0	°C	
Deflection Temperature Under Load			
1.8 MPa, Unannealed, 4.00 mm, 100 mm Span [10]	83.0	°C	ISO 75-2/Ae
1.8 MPa, Unannealed, 4.00 mm, 64.0 mm Span [9]	83.0	°C	ISO 75-2/Af
Vicat Softening Temperature	120	°C	ASTM D1525 [11]
Vicat Softening Temperature			
--	123	°C	ISO 306/B120
--	120	°C	ISO 306/B50
--	155	°C	ISO 306/A50
Ball Pressure Test (73 to 77°C)	Pass		IEC 60695-10-2
CLTE - Flow (-40 to 40°C)	9.0E-5	cm/cm/°C	ASTM E831
CLTE - Flow (23 to 80°C)	9.0E-5	cm/cm/°C	ISO 11359-2
CLTE - Transverse (-40 to 40°C)	9.5E-5	cm/cm/°C	ASTM E831
CLTE - Transverse (23 to 80°C)	9.5E-5	cm/cm/°C	ISO 11359-2
Thermal Conductivity	0.18	W/m/K	ISO 8302

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+14	ohms·cm	IEC 60093

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Electrical	Nominal Value	Unit	Test Method
Electric Strength			IEC 60243-1
1.00 mm [12]	18	kV/mm	
3.20 mm, in Oil	17	kV/mm	
Relative Permittivity			IEC 60250
50 Hz	3.30		
60 Hz	3.30		
1 MHz	3.30		
Dissipation Factor			IEC 60250
50 Hz	2.0E-3		
60 Hz	2.0E-3		
1 MHz	0.020		

Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.5 mm, Testing by SABIC)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	90 to 100	°C
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Hopper Temperature	40 to 60	°C
Rear Temperature	230 to 250	°C
Middle Temperature	240 to 265	°C
Front Temperature	250 to 270	°C
Nozzle Temperature	250 to 265	°C
Processing (Melt) Temp	255 to 270	°C
Mold Temperature	60 to 80	°C

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] Tensile Bar

[3] 50 mm/min

[4] Type I, 50 mm/min

[5] 1.3 mm/min

[6] 2.0 mm/min

[7] at Yield

[8] 80*10*4 sp=62mm

[9] 80*10*4 mm

[10] 120*10*4 mm

[11] Rate A (50°C/h), Loading 2 (50 N)

[12] Shorttime