

Technical Data Sheet

Schulablend (PC/ASA) M/MA 6401 U

Polycarbonate + ASA
LyondellBasell Industries
Engineering Plastics

Product Description

PC-ASA blend with increased impact strength, heat resistance and weather resistance. (Former name: SCHULABLEND® WR5 UV)

General

Features	• Good Impact Resistance	• Good Weather Resistance	• High Heat Resistance
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PC+ASA UV		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm³	1.20 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (260°C/5.0 Kg)	28 cm³/10min	28 cm³/10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	334000 psi	2300 MPa	ISO 527-1/1A/1
Tensile Stress			ISO 527-2/1A/50
Yield	8410 psi	58.0 MPa	
Break	6960 psi	48.0 MPa	
Tensile Strain (Yield)	5.5 %	5.5 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	60 %	60 %	ISO 527-2/1A/50
Flexural Modulus ¹	348000 psi	2400 MPa	ISO 178
Flexural Stress ¹ (6.2% Strain)	13100 psi	90.0 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	9.5 ft·lb/in²	20 kJ/m²	
73°F (23°C)	31 ft·lb/in²	65 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	No Break	No Break	
73°F (23°C)	No Break	No Break	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	257 °F	125 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	230 °F	110 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	275 °F	135 °C	ISO 306/B50
--	284 °F	140 °C	ISO 306/A50

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 60093
Volume Resistivity	> 1.0E+13 ohms·m	> 1.0E+13 ohms·m	IEC 62631-3-1

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 In (1.5 Mm)	HB	HB	
0.12 In (3.0 Mm)	HB	HB	

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Additional Information

The tradename "Schulablend" may be abbreviated "SBL" in documents or on labels.

Characteristic properties

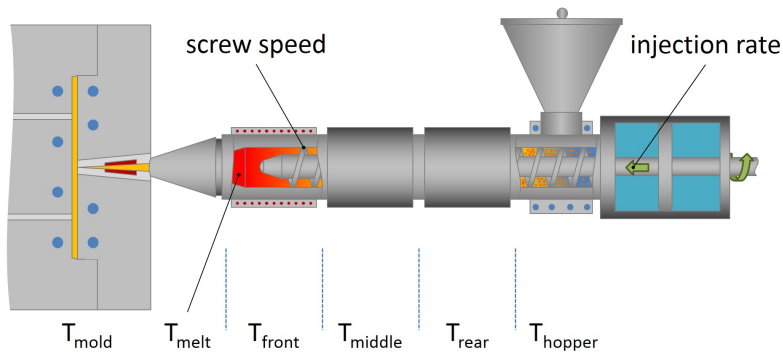
Retaining good impact-strength to low temperatures, PC-ASA blend also possess high rigidity, hardness and high heat deflection. Additional to this the material is highly UV resistant. Material has a glossy appearance.

- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	212 °F	100 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Hopper Temperature	158 °F	70 °C
Rear Temperature	482 °F	250 °C
Middle Temperature	518 °F	270 °C
Front Temperature	554 °F	290 °C
Processing (Melt) Temp	500 to 554 °F	260 to 290 °C
Mold Temperature	140 to 194 °F	60 to 90 °C
Injection Pressure	11600 to 21800 psi	80.0 to 150 MPa
Injection Rate	Fast	Fast
Holding Pressure	4350 to 10900 psi	30.0 to 75.0 MPa
Back Pressure	725 to 2180 psi	5.00 to 15.0 MPa
Cushion	0.0787 to 0.197 in	2.00 to 5.00 mm
Screw Speed	1 in/min	24 mm/min

Injection Notes

Predrying

Predrying should effect a moisture content of 0,02%, otherwise you get material degradation and bubbles. Typically predrying at 100°C for ca. 4-6 hours is recommended in a dehumidifying dryer.

Reprocessing

Recycle content 10 - 20%. Use only well dried regrind. It should be tested if parts made with regrind material fulfil the part specifications.

Shut down

For long breaks don't shut off the machine but reduce the temperature to 180°C. Otherwise purge with polyolefines or SAN.

Finishing

(PC/ASA) is suitable for machining. Varnishing, printing, gluing and embossing can be carried out using commercially available products.

Notes

¹ 0.079 in/min (2.0 mm/min)