

## Technical Data Sheet



# Schulablend M/MA 6401 U

Polycarbonate + ASA  
LyondellBasell Industries  
Engineering Plastics

### Product Description

PC-ASA blend with increased impact strength, heat resistance and weather resistance.  
Also available without UV stabilization.

### General

|                     |                                          |                             |                        |
|---------------------|------------------------------------------|-----------------------------|------------------------|
| Material Status     | • Commercial: Active                     |                             |                        |
| Availability        | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• Latin America | • North America        |
| 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/cm <sup>3</sup>    | 1.20 g/cm <sup>3</sup>    | ISO 1183/A      |
| Melt Volume-Flow Rate (MVR) (260°C/5.0 kg) | 28 cm <sup>3</sup> /10min | 28 cm <sup>3</sup> /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 <sup>1</sup>              | 348000 psi                | 2400 MPa                  | ISO 178         |
| Flexural Stress <sup>1</sup> (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)                              | 7.1 ft·lb/in <sup>2</sup> | 15 kJ/m <sup>2</sup>      |                 |
| 73°F (23°C)                                | 30 ft·lb/in <sup>2</sup>  | 62 kJ/m <sup>2</sup>      |                 |
| 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     |

### 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.

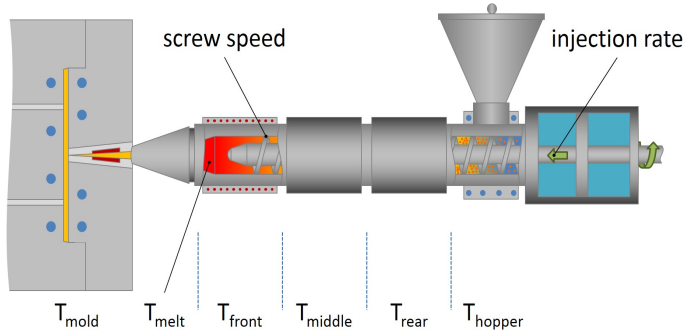
- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications

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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.

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**Notes**

<sup>1</sup> 0.079 in/min (2.0 mm/min)

**Notes**

These are typical property values not to be construed as specification limits.

**Processing Techniques**

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

**Product Storage and Handling**

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

**Company Information**

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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