

Technical Data Sheet



Centrex 810

Acrylonitrile Styrene Acrylate
LyondellBasell Industries
Engineering Plastics

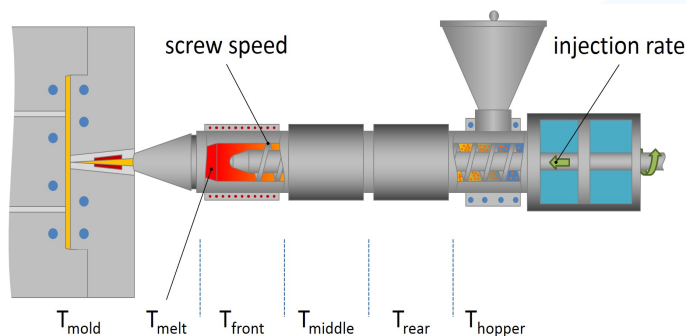
General			
Material Status	• Commercial: Active		
Availability	• North America		
Features	• Good Processability • Good Weather Resistance	• High Flow • High Gloss	• Medium Impact Resistance
Uses	• Outdoor Applications		
Forms	• Pellets		
Processing Method	• Injection Molding		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.06	1.06 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	21 g/10 min	21 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ¹	357000 psi	2460 MPa	ASTM D638
Tensile Strength ¹ (Yield)	5900 psi	40.7 MPa	ASTM D638
Flexural Modulus - Tangent ²	347000 psi	2390 MPa	ASTM D790
Flexural Strength ²	10200 psi	70.3 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-22°F (-30°C), 0.125 in (3.18 mm)	1.0 ft·lb/in	53 J/m	
32°F (0°C), 0.125 in (3.18 mm)	1.2 ft·lb/in	64 J/m	
73°F (23°C), 0.125 in (3.18 mm)	1.6 ft·lb/in	85 J/m	
Instrumented Dart Impact			ASTM D3763
-22°F (-30°C), Total Energy	88.5 in·lb	10.0 J	
32°F (0°C), Total Energy	354 in·lb	40.0 J	
73°F (23°C), Total Energy	398 in·lb	45.0 J	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	100	100	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	165 °F	74.0 °C	
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	176 °F	80.0 °C	
Vicat Softening Temperature			
--	199 °F	93.0 °C	ASTM D1525 ³
--	219 °F	104 °C	ASTM D1525 ⁴

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature - Desiccant Dryer	180 to 190 °F	82 to 88 °C
Drying Time - Desiccant Dryer	2.0 hr	2.0 hr
Dew Point - Desiccant Dryer	-20 °F	-29 °C
Suggested Max Moisture	0.10 %	0.10 %
Suggested Shot Size	50 to 70 %	50 to 70 %
Rear Temperature	460 to 520 °F	238 to 271 °C
Middle Temperature	460 to 520 °F	238 to 271 °C
Front Temperature	460 to 520 °F	238 to 271 °C
Nozzle Temperature	460 to 520 °F	238 to 271 °C
Processing (Melt) Temp	460 to 520 °F	238 to 271 °C
Mold Temperature	110 to 180 °F	43 to 82 °C
Injection Rate	Moderate	Moderate
Screw L/D Ratio	20.0:1.0	20.0:1.0
Screw Compression Ratio	2.5:1.0	2.5:1.0

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Notes

¹ 0.20 in/min (5.1 mm/min)

² 0.050 in/min (1.3 mm/min)

³ Rate A (50°C/h), Loading 2 (50 N)

⁴ Rate B (120°C/h), Loading 1 (10 N)

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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