

Technical Data Sheet



Centrex 814

Acrylonitrile Styrene Acrylate
LyondellBasell Industries
Engineering Plastics

General			
Material Status	• Commercial: Active		
Availability	• North America		
Features	• Good Processability • Good Weather Resistance	• High Gloss • High Impact Resistance	• UV Resistant
Uses	• Decorative Displays • Electronic Displays • Lawn and Garden Equipment	• Marine Applications • Outdoor Applications • Spas	• Sporting Goods • Water Sports Equipment
UL File NumberUSA	• E150937		
Forms	• Pellets		
Processing Method	• Injection Molding		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.05	1.05 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/10.0 kg)	9.0 g/10 min	9.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ¹	304000 psi	2100 MPa	ASTM D638
Tensile Strength ¹ (Yield)	5600 psi	38.6 MPa	ASTM D638
Flexural Modulus - Tangent ²	325000 psi	2240 MPa	ASTM D790
Flexural Strength ²	9950 psi	68.6 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)	1.4 ft·lb/in	75 J/m	
73°F (23°C), 0.125 in (3.18 mm)	5.0 ft·lb/in	270 J/m	
Instrumented Dart Impact			ASTM D3763
-22°F (-30°C)	72.6 in·lb	8.20 J	
73°F (23°C)	292 in·lb	33.0 J	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	101	101	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)	160 °F	71.1 °C	
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	170 °F	76.7 °C	
Vicat Softening Temperature	214 °F	101 °C	ASTM D1525 ³
RTI Elec (0.06 in (1.5 mm))	122 °F	50.0 °C	UL 746B
RTI Imp (0.06 in (1.5 mm))	122 °F	50.0 °C	UL 746B
RTI Str (0.06 in (1.5 mm))	122 °F	50.0 °C	UL 746B
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating	HB	HB	UL 94

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	180 to 190 °F	82 to 88 °C
Drying Time	2.0 hr	2.0 hr
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 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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