

Technical Data Sheet

Centrex 813

Acrylonitrile Styrene Acrylate + AES

LyondellBasell Industries

Engineering Plastics

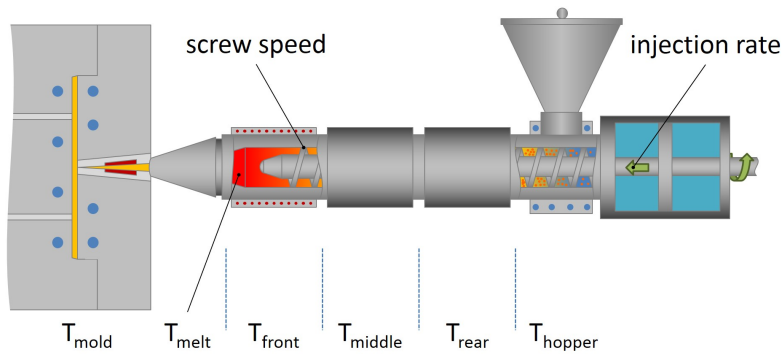
General			
Features	• Good Processability • Good Weather Resistance	• High Gloss • High Impact Resistance	• Low Temperature Impact Resistance • UV Resistant
Uses	• Electronic Displays • Lawn and Garden Equipment	• Marine Applications • Outdoor Applications	• Water Sports Equipment
Agency Ratings	• EC 1907/2006 (REACH)	• EU 2002/96/EC (WEEE)	
RoHS Compliance	• RoHS Compliant		
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) (220°C/10.0 Kg)	8.0 g/10 min	8.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ¹	290000 psi	2000 MPa	ASTM D638
Tensile Strength ¹ (Yield)	4900 psi	33.8 MPa	ASTM D638
Flexural Modulus - Tangent ²	280000 psi	1930 MPa	ASTM D790
Flexural Strength ²	7900 psi	54.5 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-40°F (-40°C), 0.125 In (3.18 Mm)	1.0 ft·lb/in	53 J/m	
73°F (23°C), 0.125 In (3.18 Mm)	7.6 ft·lb/in	410 J/m	
Instrumented Dart Impact			ASTM D3763
-40°F (-40°C), Total Energy	195 in·lb	22.0 J	
73°F (23°C), Total Energy	292 in·lb	33.0 J	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	85	85	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)	158 °F	70.0 °C	
264 Psi (1.8 Mpa), Unannealed, 0.500 In (12.7 Mm)	171 °F	77.0 °C	
Vicat Softening Temperature	213 °F	101 °C	ASTM D1525 ³
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 In (1.5 Mm))	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	150 to 190 °F	66 to 88 °C
Injection Rate	Moderate-Fast	Moderate-Fast
Screw L/D Ratio	20.0:1.0	20.0:1.0
Screw Compression Ratio	2.5:1.0	2.5:1.0

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.