Technical Data Sheet

Centrex 814

Acrylonitrile Styrene Acrylate
LyondellBasell Industries
Engineering Plastics

General			
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
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/cm³	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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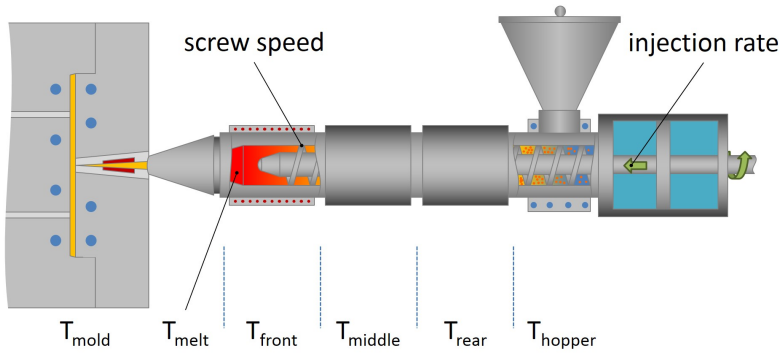

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	180 to 190 °F	82 to 88 °C
Drying Time	2.0 hr	2.0 hr
Suggested Max Moisture	0.10 %	0.10 %
Suggested Shot Size	50 to 70 %	50 to 70 %
Rear Temperature	460 to 520 °F	238 to 271 °C
Middle Temperature	460 to 520 °F	238 to 271 °C
Front 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

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.