

Technical Data Sheet



Centrex 810

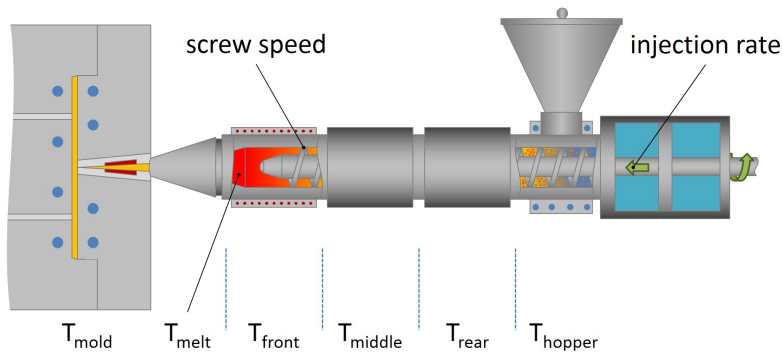
Acrylonitrile Styrene Acrylate
LyondellBasell Industries
Engineering Plastics

General			
Features	• Good Processability • Good Weather Resistance • High Flow • High Gloss • Medium Impact Resistance		
Uses	• Outdoor Applications		
Agency Ratings	• EC 1907/2006 (REACH) • EU 2002/96/EC (WEEE)		
RoHS Compliance	• RoHS Compliant		
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

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.