

Technical Data Sheet



Centrex ASA 821

Acrylonitrile Styrene Acrylate
LyondellBasell Industries
Engineering Plastics

Product Description

CENTREX® ASA 821 is an injection molding grade with enhanced heat resistance and best chemical resistance among the ASA grades.

General

Material Status	• Commercial: Active		
Availability	• North America		
Features	• Chemical Resistant	• Good Stiffness	• UV Resistant
Uses	• Household Goods	• Housings	
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.08 g/cm ³	1.08 g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	12 cm ³ /10min	12 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	342000 psi	2360 MPa	ISO 527-1
Tensile Stress (Yield, 73°F (23°C))	6670 psi	46.0 MPa	ISO 527-2
Tensile Strain (Yield, 73°F (23°C))	2.3 %	2.3 %	ISO 527-2
Nominal Tensile Strain at Break			ISO 527-2
73°F (23°C)	34 %	34 %	
Flexural Stress (73°F (23°C))	10700 psi	73.8 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F (-30°C)	1.9 ft·lb/in ²	4.0 kJ/m ²	
73°F (23°C)	7.1 ft·lb/in ²	15 kJ/m ²	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	108	108	ISO 2039-2
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	207 °F	97.1 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	185 °F	85.0 °C	ISO 75-2/A
Vicat Softening Temperature			ISO 306
-- 1	210 °F	99.0 °C	
-- 2	228 °F	109 °C	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	464 to 536 °F	240 to 280 °C
Mold Temperature	104 to 176 °F	40 to 80 °C

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Notes

¹ ISO 306/B50

² ISO 306/A50

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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