

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

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/cm³	1.08 g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (220°C/10.0 Kg)	12 cm³/10min	12 cm³/10min	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 73°F (23°C)	34 %	34 %	ISO 527-2
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/in²	4.0 kJ/m²	
73°F (23°C)	7.1 ft·lb/in²	15 kJ/m²	

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

Notes

¹ ISO 306/B50

² ISO 306/A50

Notes

These are typical property values not to be construed as specification limits.