

Hostalen CRP 100 blue

High Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

Hostalen CRP 100 blue is a high density polyethylene (HDPE), blue coloured similar RAL 5005 with high melt viscosity for extrusion, injection and compression moulding. The product is classified as PE 100 and provides excellent stress crack resistance properties (ESCR) combined with very good long term hydrostatic strength. It is not intended for medical and pharmaceutical applications.

General

Material Status	• Commercial: Active		
Literature ¹	• Processing - Mold Shrink (English) • Processing - PE Films (English) • Processing - Polyolefin Injection Molding Guide (English) • Technical Datasheet (English)		
Search for UL Yellow Card	• LyondellBasell Industries • Hostalen		
Availability	• Africa & Middle East	• Asia Pacific	• Europe
Features	• High ESCR (Stress Crack Resist.)	• High Viscosity	
Uses	• Piping		
Appearance	• Blue		
Forms	• Pellets		
Processing Method	• Compression Molding • Extrusion	• Injection Molding • Pipe Extrusion	• Sheet Extrusion

Physical	Nominal Value Unit	Test Method
Density	0.950 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)		ISO 1133
190°C/21.6 kg	6.4 g/10 min	
190°C/5.0 kg	0.23 g/10 min	
FNCT ³ (80°C)	> 1.4 month	ISO 16770

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus - Secant (23°C)	850 MPa	ISO 527-2/1
Tensile Stress (Yield, 23°C)	23.0 MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	8.0 %	ISO 527-2/50
Tensile Creep Modulus ⁴		ISO 899-1
1 hr	800 MPa	
1000 hr	350 MPa	
Flexural Strength (3.5% Strain)	20.0 MPa	ISO 178
Flexural Creep Modulus ⁵		DIN 19537-2
1 min	1.10 GPa	
2000 hr	0.330 GPa	
24 hr	0.560 GPa	

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179
-30°C	15 kJ/m²	
23°C	29 kJ/m²	

Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore D, 3 sec)	62	ISO 868

Thermal	Nominal Value Unit	Test Method
Vicat Softening Temperature	74.0 °C	ISO 306/B50
Oxidation Induction Time (210°C)	30 min	ISO 11357-6

Additional Information	Nominal Value Unit	Test Method
MRS Classification	10.0 MPa	ISO TR 9080