

Hostalen CRP 100 RESIST CR black

High Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

Hostalen CRP 100 RESIST CR black is a high density polyethylene (HDPE), black coloured similar RAL 9004 with high melt viscosity for extrusion, injection and compression moulding. The product is classified as PE 100-RC and provides a very good long term hydrostatic strength. Especially developed for non-conventional pipe installations methods the product has a superior resistance to slow crack growth. It fulfills the material requirements of PAS 1075:2009-04

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 • Latin America	• North America
Additive	• Carbon Black (2%)		
Features	• Good Crack Resistance	• Good Strength	• High Viscosity
Uses	• Industrial Applications	• Piping	
Agency Ratings	• PPI PE-100		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Compression Molding • Extrusion	• Injection Molding • Pipe Extrusion	• Sheet Extrusion

Physical	Nominal Value Unit	Test Method
Density	0.958 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 yr	ISO 16770

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus - Secant (23°C)	900 MPa	ISO 527-2/1
Tensile Stress (Yield, 23°C)	23.0 MPa	ISO 527-2/50
Tensile Strain		
Yield, 23°C	9.0 %	ISO 527-2/50
Break	> 350 %	EN 638
Tensile Creep Modulus ⁴		ISO 899-1
1 hr	850 MPa	
1000 hr	360 MPa	
Flexural Strength (3.5% Strain)	21.0 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	13 kJ/m²	
23°C	26 kJ/m²	

Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore D, 3 sec)	63	ISO 868