

# Hostalen CRP 100 black

## Polyethylene, High Density

### Product Description

**Hostalen CRP 100 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 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.

### Product Characteristics

<b>Status</b>	Commercial: Active
<b>Test Method used</b>	ISO
<b>Availability</b>	Europe, Asia-Pacific
<b>Processing Method</b>	Extrusion Pipe Sheet and Semi Finished Products
<b>Typical Customer Applications</b>	Gas Pipe, Industrial, Soil & Waste Pipe, Drinking Water Pipe

Typical Properties	Method	Value	Unit
<b>Physical</b>			
Density	ISO 1183	0.959	g/cm <sup>3</sup>
Melt flow rate (MFR)	ISO 1133		
(190°C/21.6kg)		6.4	g/10 min
(190°C/5.0kg)		0.23	g/10 min
Staudinger index Jg	ISO 1628	380	ml/g
<b>Mechanical</b>			
Tensile Modulus (23 °C, v = 1 mm/min, Secant)	ISO 527-1, -2	900	MPa
Tensile Stress at Yield (23 °C, v = 50 mm/min)	ISO 527-1, -2	23	MPa
Tensile Strain at Yield (23 °C, v = 50 mm/min)	ISO 527-1, -2	9	%
Tensile Creep Modulus 1h	ISO 899-1	850 [2.0]	MPa
<i>Note: [Test stress in MPa]</i>			
Tensile Creep Modulus 1000h	ISO 899-1	360 [2.0]	MPa

*Note:* [Test stress in MPa]

Maximum elongation TD	EN 638	>350	%
MRS classification	ISO/TR 9080	10	MPa
Flexural stress at 3,5% deflection	ISO 178	21	MPa
FNCT (4.0 MPa, 2% Arkopal N 100, 80°C)	ISO 16770	>1000	h
Flexural creep modulus	DIN 19537-2		
(4 point loading method, 1 min-value)		1100	MPa
(4 point loading method, 24 h-value)		560	MPa
(4 point loading method, 2000 h-value)		330	MPa
<b>Impact</b>			
Charpy notched impact strength	ISO 179		
(23 °C)		26	kJ/m <sup>2</sup>
(-30 °C)		13	kJ/m <sup>2</sup>
<b>Hardness</b>			
Shore hardness (Shore D (3 sec))	ISO 868	63	
<b>Thermal</b>			
Vicat softening temperature (VST/B/50 K/h (50 N))	ISO 306	74	°C
Oxidation induction time (OIT) (210°C)	EN 728	30	min
<b>Additional Information</b>			
Carbon black content	ISO 6964	2.25	%
Odor treshold	EN 1622/EN 1240	< 2	

## Notes

Typical properties; not to be construed as specifications