



Hostalen CRP 100 RT black

Polyethylene, High Density

Product Description

Hostalen CRP 100 RT 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 used by customers in pipe and sheet applications and provides excellent stress crack resistance properties (ESCR) combined with very good long term hydrostatic strength even at raised temperature (RT).

It has an excellent heat ageing and extremely high extraction stability.

It is not intended for medical and pharmaceutical applications.

Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	Europe, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America
Processing Methods	Extrusion Pipe Sheet and Semi Finished Products
Typical Customer Applications	Drinking Water Pipe, Industrial, Pipes, Soil & Waste Pipe

Typical Properties	Method	Value	Unit
Physical			
Density	ISO 1183	0.957	g/cm ³
Melt flow rate (MFR)	ISO 1133		
(190°C/21.6kg)		9.5	g/10 min
(190°C/5.0kg)		0.45	g/10 min
Mechanical			
Tensile Modulus (23 °C, v = 1 mm/min, Secant)	ISO 527-1, -2	1050	MPa
Tensile Stress at Yield (23 °C, v = 50 mm/min)	ISO 527-1, -2	22	MPa
Tensile Strain at Break (4 mm, 23 °C, 50 mm/min, Compression molding)	ISO 527-1, -2	600	%
<i>Note: Tensile bar, cutted from compression molded plate</i>			
Tensile Strain at Yield (23 °C, v = 50 mm/min)	ISO 527-1, -2	8	%
Tensile Creep Modulus 1h	ISO 899-1	640 [2.0]	MPa
<i>Note: [Test stress in MPa]</i>			
Tensile Creep Modulus 1000h	ISO 899-1	300 [2.0]	MPa
<i>Note: [Test stress in MPa]</i>			
Maximum elongation TD	EN 638	≥ 350	%
<i>Note: Tensile bar, cutted from pipes acc EN 638</i>			
Flexural stress at 3,5% deflection	ISO 178	18	MPa
FNCT (4.0 MPa, 2% Arkopal N 100, 80°C)	ISO 16770	350	h
Flexural creep modulus	DIN 19537-2		
(4 point loading method, 1 min-value)		1000	MPa
(4 point loading method, 24 h-value)		470	MPa
(4 point loading method, 2000 h-value)		300	MPa
Impact			

Charpy notched impact strength			
(23 °C)		24	kJ/m ²
(-30 °C)		8	kJ/m ²

Hardness

Shore hardness (Shore D (3 sec))	ISO 868	59	
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Thermal

Vicat softening temperature (VST/B/50 K/h (50 N))	ISO 306	70	°C
Oxidation induction time (OIT) (210°C)	ISO 11357-6 / EN 728	40	min

Additional Information

Carbon black content	ISO 6964	2.25	%
Odor treshold	EN 1622/EN 1420	< 2.0	

Additional Properties

Processing:
Recommended melt temperatures: 190-230 °C.
Recommended injection moulding temperatures: 200-280 °C.

Notes

Typical properties; not to be construed as specifications.