Technical Data Sheet

Hostalen CRP 100 W BLUE

High Density Polyethylene

lyondellbasell

Product Description

Hostalen CRP 100 W blue is a high density polyethylene (HDPE), dark blue colored similar RAL 5005 with high melt viscosity for extrusion and injection molding. The product is classified as PE 100 and provides excellent stress crack resistance properties (ESCR) combined with very good long term hydrostatic strength.
The compound fulfills the material requirements of EN 12201-1 and ISO 4427-1.

This grade is not intended for medical and pharmaceutical applications.

This grade is supported for use in drinking water applications.

Status	Commercial: Active
Availability	Africa-Middle East; Asia-Pacific; Australia and New Zealand; Europe; South & Central America
Application	Drinking Water Pipe
Market	Pipe
Processing Method	Pipe; Sheet
Attribute	Good Creep Resistance; Good ESCR (Environmental Stress Cracking Resistance); Good Organoleptic Properties; Weldable

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(190 °C/5.0 kg)	0.27	g/10 min	ISO 1133-1
(190 °C/21.6 kg)	7.3	g/10 min	ISO 1133-1
Density	0.950	g/cm³	ISO 1183-1
Mechanical			
Flexural Creep Modulus			
(4-point loading / 1 min)	1100	MPa	DIN 16841
(4-point loading / 24 hr)	560	MPa	DIN 16841
(4-point loading / 2000 hr)	330	MPa	DIN 16841
Tensile Modulus, (23 °C)	1050	MPa	ISO 527-1, -2
Tensile Creep Modulus			
(1 hr / 2 MPa)	800	MPa	ISO 899-1
(1000 hr / 2 MPa)	350	MPa	ISO 899-1
Tensile Stress at Yield, (23 °C, 50 mm/min)	23	MPa	ISO 527-1, -2
Tensile Strain at Break, (23 °C)	650	%	ISO 527-1, -2
Tensile Strain at Yield, (23 °C, 50 mm/min)	8	%	ISO 527-1, -2
MRS Classification	10	MPa	ISO 9080
FNCT, (4.0 MPa, 2% Arkopal N100, 80 °C)	>=1000	hr	ISO 16770
Impact			

Charpy Impact Strength - Notched			
(23 °C)	26	kJ/m²	ISO 179-1/1eA
(-30 °C)	13	kJ/m²	ISO 179-1/1eA
Hardness			
Shore Hardness, (Shore D, 3 sec)	62		ISO 868
Thermal			
Vicat Softening Temperature, (B50)	74	°C	ISO 306
Oxidation Induction Time, (210 °C)	30	min	ISO 11357-6
DSC Melting Point	129	°C	DSC
Additional Information			
Odor Threshold	<=2		EN 1622/EN 1420
measured on pellets / 30°C / 4 h extraction time			

Notes

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

Processing Techniques

Users should determine the conditions necessary to obtain optimum product properties and suitability of the product for the intended application.

Recommended melt temperatures: 190 °C to 230 °C.

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Further Information

Health and Safety:

The resin is manufactured to the highest standards, but special requirements apply to certain applications such as food end-use contact and direct medical use. For specific information on regulatory compliance contact your local representative.

Workers should be protected from the possibility of skin or eye contact with molten polymer. Safety glasses are suggested as a minimal precaution to prevent mechanical or thermal injury to the eyes.

Molten polymer may be degraded if it is exposed to air during any of the processing and off-line operations. The products of degradation may have an unpleasant odor. In higher concentrations they may cause irritation of the mucus membranes. Fabrication areas should be ventilated to carry away fumes or vapours. Legislation on the control of emissions and pollution prevention should be observed.

The resin will burn when supplied with excess heat and oxygen. It should be handled and stored away from contact with direct flames and/or ignition sources. While burning, the resin contributes high heat and may generate a dense black smoke.

Recycled resins may have previously been used as packaging for, or may have otherwise been in contact with, hazardous goods. Converters are responsible for taking all necessary precautions to ensure that recycled resins are safe for continued use.

For further information about safety in handling and processing please refer to the Safety Data Sheet.