Borcoat[™] HE3450

High Density Polyethylene

Borealis AG

Message:

Borcoat HE3450 is a bimodal, high density polyethylene compound and is coloured black.

Borcoat HE3450 contains finely dispersed carbon black that helps to impart excellent weathering properties.

Borcoat HE3450 is produced using advanced Borstar[®] technology that provides the material with good melt strength and extrudability, as well as superior mechanical properties at both low and high temperatures and very good ESCR.

Borcoat HE3450 is intended to fulfill following National and International standards, when appropriate industrial manufacturing standard procedures are applied and a continuous quality system is implemented and when used in combination with ME0420 or ME0433 and a compatible powder epoxy. NFA 49710

DIN 30670S

CAN/CSA-Z245.21

Draft ISO 21809-1

Borcoat HE3450 is suitable for severe lay conditions at low or elevated ambient temperatures. High processing speeds and a reduction in layer thickness may be possible under certain conditions. Operating temperatures up to 90°C are possible when used in a correctly composed and applied system.

Carbon black (2%)		
High ESCR (Stress Cracking Resistance)		
Recyclable materials		
Workability, good		
Good melt strength		
Good weather resistance		
Pipeline coating		
Coating application		
CSA Z245.21		
Black		
Particle		
Extrusion coating		
Nominal Value	Unit	Test Method
0.942	g/cm³	ISO 1183
2.0	g/10 min	ISO 1133
5000	hr	IEC 60811-4-1/B
5000	hr	ASTM D1693A
> 2.0	%	ASTM D1603
Nominal Value	Unit	Test Method
60		ASTM D2240
Nominal Value	Unit	Test Method
> 26.0	MPa	ASTM D638
> 600	%	ASTM D638
	Carbon black (2%) High ESCR (Stress Cracking Resistant Recyclable materials Workability, good Good melt strength Good weather resistance Pipeline coating Coating application Coating application CSA Z245.21 Black Particle Extrusion coating Nominal Value 0.942 2.0 Sou0 5000 5000 5000 5000 2.0 Nominal Value 60 Nominal Value 60 Nominal Value 60 Nominal Value	Carbon black (2%) High ESCR (Stress Cracking Resistance) Recyclable materials Workability, good Good melt strength Good weather resistance Pipeline coating Coating application Coating application SA Z245.21 Black Particle Extrusion coating 0.942 9.042 900 5000 hr 5000 hr 5000 Nominal Value Unit 5000 Nominal Value Vorial 5000 Nominal Value Vorial Value

Thermal	Nominal Value	Unit	Test Method	
Brittleness Temperature	< -82.0	°C	ASTM D746	
Vicat Softening Temperature	120	°C	ISO 306/A50	
Melting Temperature (DSC)	128	°C	ISO 3146	
Electrical	Nominal Value	Unit	Test Method	
Volume Resistivity	10	ohms·cm	ASTM D257	
Dielectric Strength	30	kV/mm	IEC 60243-1	
Extrusion	Nominal Value	Unit		
Drying Temperature	90.0	°C		
Cylinder Zone 1 Temp.	190 - 210	°C		
Cylinder Zone 2 Temp.	190 - 210	°C		
Cylinder Zone 3 Temp.	190 - 210	°C		
Cylinder Zone 4 Temp.	190 - 210	°C		
Cylinder Zone 5 Temp.	190 - 210	°C		
Melt Temperature	220 - 240	°C		
Die Temperature	190 - 210	°C		
Extrusion instructions				
Maximum Recommended Melt Temperature: <260°CHead Temperature: 190 to 210°C				
NOTE				

1.

Base resin, ISO 1872-2

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

