



Polyethylene BorcoatTM HE7405

High Density Polyethylene for Steel Pipe Coating

Description

Borcoat HE7405 is a black compound supplied in powder form.

This product is thermal, as well as UV-stabilized.

Applications

Borcoat HE7405 is recommended as a rough coat on PE coating, or repair of small damaged areas of PE coating systems used in:

Steel Pipe Coating

Special features

Borcoat HE7405 is applied directly after the top coat application and before cooling of the coated pipe. This provides a coating with increased surface friction and roughness compared to normal PE coatings. Typical applications include:

The application of concrete weight coating
Pipes installed in steep terrain to increase friction with the surrounding ground

Increased safety when people are walking on pipes during handling and loading operations
Offshore pipes without concrete weight coating to increase the grip in the caterpillar clamps during laying operations

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density (Compound)	944 kg/m ³	ISO 1872-2/ISO 1183
Melt Flow Rate (190 °C/2,16 kg)	8 g/10min	ISO 1133
Melt Flow Rate (190 °C/5 kg)	30 g/10min	ISO 1133
Melting temperature	130 °C	ISO 11357-3
Oxidation Induction Time (210 °C),	> 20 min	ISO 11357
Vicat softening temperature A50, (9,8 N)	108 °C	ISO 306
Hardness, Shore D	58	ISO 868

Application Related Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Main particle size	212 - 500 µm	ASTM D 1921

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Processing Techniques

Borcoat HE7405 is a powdered material and is applied directly on top of still molten PE top coat in the coating process before quenching in the cooling unit. There are a number of methods used to apply the powder such as electrostatic spray, using a shaker plate mechanism or a belt dosing unit with a funnel-shaped outlet. Other methods may also be suitable. The application rate and consistency is dependent on the type of application equipment, coating unit design, dimensions of the steel pipe, temperature of the coated pipe and the line speed. For side extrusion (wrapping), an additional light-weight roller reduces the amount of loose particles. Some experimental design must be done to have a suitable set up. Please contact your Borealis representative for more details.

Storage

Borcoat HE7405 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

Safety

The product is not classified as dangerous.

Recycling

The products are suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of safety, recovery and disposal of the product. For more information, contact your Borealis representative.

Related Documents

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.

Recovery and disposal of polyolefins
Information on emissions from processing and fires
"Safety data sheet" / "Product safety information sheet"

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Disclaimer

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borealis makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of Borealis' products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

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