## Polyethylene

# Borcoat™ HE7405

High Density Polyethylene for Steel Pipe Coating

## Description

**Borcoat HE7405** is a black coloured compound supplied in powder form.

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

## Applications

**Borcoat HE7405** is recommended to be used as a rough coat on PE coatings, or as 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:

PE coated pipes on which a concrete weight coating is applied
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<br>Data should not be used for specification work | Test Method |
|---|---|---|
| Density (Compound) | 944 kg/m³ | ISO 1183-1, Method A |
| Melt Flow Rate (190 °C/2,16 kg) | 8 g/10min | ISO 1133-1, Method B |
| Melt Flow Rate (190 °C/5 kg) | 30 g/10min | ISO 1133-1, Method B |
| Melting temperature | 130 °C | ISO 11357-3 |
| Oxidation Induction Time (210 °C), | > 20 min | ISO 11357-6 |
| Vicat softening temperature A50, (9,8 N) | 108 °C | ISO 306 |
| Hardness, Shore D (1 s) | 58 | ISO 868 |

## Application Related Properties

| Property | Typical Value<br>Data should not be used for specification work | Test Method |
|---|---|---|
| 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** shall be stored indoors below 50°C in unopened original packaging in clean and dry environment. It is recommended to ensure proper stock rotation by using first in – first out principle. Following afore-mentioned conditions the material can safely be stored for a period of up to 3 years after production. However, caution shall be taken regarding the moisture level. It is recommended to measure the moisture after longer storage periods prior to processing.

## Safety
The product is not classified as harmful to humans or the environment according to CLP regulation (EU) No. 1272/2008. According to Article 31 of Regulation (EC) 1907/2006 there is no legal requirement to provide a SDS for this product. Existing Product safety information sheet is valid.

## Recycling
The product is 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 any Borealis product in conjunction with any other products and/or materials. The information contained herein relates exclusively to our products when not used in conjunction with any other material unless as specifically provided for in the test methods stated above.

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