



Polyethylene Borcoat™ ME0410

Grafted Polyethylene adhesive for Steel Pipe Coating

Description

Borcoat ME0410 is a maleic anhydride grafted polyethylene adhesive.

The product is supplied in pellet form

Applications

Borcoat ME0410 is recommended as an adhesive for a three layer PE system used in:

Steel Pipe Coating

Specifications

Borcoat ME0410 is intended to fulfil 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 Borcoat HE3450, HE3450-H or HE3453 and a compatible Fusion Bonded Epoxy(FBE) powder.

NF A49-710
CAN/CSA-Z245.21

EN ISO 21809-1
DIN 30670

Special Features

Borcoat ME0410 is intended to be used as an adhesive for PE three layer systems at design temperatures between -40°C up to +80°C.

Physical Properties

Property	Typical Value	Test Method
	Data should not be used for specification work	
Density	933 kg/m ³	ISO 1183-1, Method A
Melt Flow Rate (190 °C/2,16 kg)	1,4 g/10min	ISO 1133
Tensile Strain at Break (50 mm/min) (23 °C)	> 600 %	ISO 527
Tensile Stress at Yield (50 mm/min) (23 °C)	12 MPa	ISO 527
Tensile Stress at Break (50 mm/min) (23 °C)	17 MPa	ISO 527
Melting temperature (DSC)	122 °C	ISO 11357-3
Oxidation Induction Time (200 °C),	>= 30 min	ISO 11357
Vicat softening temperature A50, (10 N)	100 °C	ISO 306
Hardness, Shore D (1 s)	50	ISO 868
Moisture	300 ppm	ISO 15512
Peel strength (3 layer) (23 °C)	> 200 N/cm	ISO 21809-1
Peel strength (3 layer) (65 °C)	> 80 N/cm	ISO 21809-1
Peel strength (3 layer) (80 °C)	> 50 N/cm	ISO 21809-1

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Other properties

Property	Typical Value Data should not be used for specification work	Test Method
Reactive Site Content	>= 0,15 %	BTM = Borealis Test Method

Processing Techniques

The actual conditions will depend on the type of equipment used.

Borcoat ME0410 can be applied by flat die or crosshead extrusion. The actual conditions will depend on the type of equipment used.

Cylinder	200 - 230 °C
Head	210 - 230 °C
Die	210 - 230 °C
Melt temperature	200 - 230 °C
Steel pipe temperature	180 - 210 °C

Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. Please contact your local Borealis representative for such particulars.

Packaging

Package: Pellets 25 kg Bags on 1375 kg pallet
Bulk

Storage

Borcoat ME0410 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 DPD 1999/45/EC or 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.



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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.

Related Documents

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

Recovery and disposal of polyolefins

Information on migration

"Safety data sheet" / "Product safety information sheet"

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.