

PRODUCT DATA SHEET

04.07.2016 Ed.1



Polypropylene

Borcoat™ EB133E-1199-LT

Polypropylene compound for Steel Pipe Coating

Description

Borcoat EB133E-1199-LT is an elastomer modified compound, based on polypropylene copolymer.

It has excellent low temperature impact resistance. The product is coloured white. It includes a combination of stabilisers to ensure long-term thermal stability.

The product is supplied in pellet form

Applications

Borcoat EB133E-1199-LT is recommended as a top coat for multilayer PP systems and thermal insulation used in:

Steel Pipe Coating

Specifications

Borcoat EB133E-1199-LT 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™ BB122E-LT and a compatible powder epoxy.

ISO 21809-1
DIN 30678

NF A49-711
Gazprom 2-2.2-178-2007

Due to the nature of the modified PP material, indentation resistance of the applied coating could be borderline versus some requirements of common standards and due to known variations in testing, those specified values should be separately agreed upon between the applicator and the client (end user/purchaser).

Special Features

Borcoat EB133E-1199-LT is intended for design temperatures between -20°C and +110°C and tailored for low temperature handling, transportation and installation.

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density (Compound)	915 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	1,0 g/10min	ISO 1133-1, Method A
Tensile Modulus (1 mm/min)	1.000 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min)	13 %	ISO 527-2
Tensile Strain at Break (50 mm/min)	> 400 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	22 MPa	ISO 527-2
Oxidation Induction Time (220 °C),	> 30 min	ISO 11357
Vicat softening temperature A50,	> 135 °C	ISO 306

Borcoat is a trademark of the Borealis group.

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Environmental Stress Crack Resistance (, Igepal 10 %, F50)	> 3.000 h	ASTM D 1693-A
Charpy Impact Strength, notched (23 °C)	60 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	5 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-30 °C)	4 kJ/m ²	ISO 179/1eA
Hardness, Shore D (1 s)	60	ISO 868
Moisture	< 500 ppm	Karl Fischer-titration

Application Related Tests

Property	Typical Value	Test Method
Data should not be used for specification work		
UV and thermal ageing (ΔMFR)	<= 35 %	ISO 21809-1, Annex G
Impact strength at -20°C ¹	> 10 J/mm	ISO 21809-1, Annex E

¹ when used in combination with Borcoat BB122E-LT

Processing Techniques

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

Extrusion

Cylinder	200 - 220 °C
Head	210 - 220 °C
Die	200 - 240 °C
Melt temperature	200 - 240 °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.

Storage

Borcoat EB133E-1199-LT It is recommended to ensure proper stock rotation by using first in – first out principle. shall be stored indoors below 50°C in unopened original packaging in clean and dry environment. Following aforementioned 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 dangerous.

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**Polypropylene****Borcoat EB133E-1199-LT****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 product.

Recovery and disposal of polyolefins
Information on emissions from processing and fires
"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.

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