Polypropylene

Borcoat™ BB122E-LT

Grafted Polypropylene adhesive for Steel Pipe Coating

Description

Borcoat BB122E-LT is a maleic anhydride grafted polypropylene adhesive.

The product is supplied as pellets for melt extrusion

It has excellent low temperature impact resistance.

The product is non-pigmented.

Applications

Borcoat BB122E-LT is recommended as an adhesive for multi-layer PP systems used in

Steel Pipe Coating

Specifications

Borcoat BB122E-LT is intended to fulfil following National and International standards, when appropriate industrial manufacturing standard procedures are applied, a continuous quality system is implemented and when used in combination with a compatible Fusion Bonded Epoxy (FBE) powder.

ISO 21809-1
DIN 30678
NF A49-711
Gazprom 2-2.2-178-2007

Special Features

Borcoat BB122E-LT can be used as an adhesive for PP three layer systems and the product is intended for design temperatures between -20°C and +110°C and tailored for low temperature applications. For multilayer thermal insulation systems the design temperature can go up to 130 °C.

Physical Properties

Property	Typical Value Data should not be used for specification work	Test Method
Density	900 kg/m³	ISO 1183-1, Method A
Melt Flow Rate (230 °C/2,16 kg)	7 g/10min	ISO 1133-1, Method B
Tensile Modulus (1 mm/min) (23 °C)	900 MPa	ISO 527-2
Tensile Strain at Break (50 mm/min) (23 °C)	>= 400 %	ISO 527-2
Tensile Stress at Yield (50 mm/min) (23 °C)	18 MPa	ISO 527-2
Tensile Stress at Break (50 mm/min) (23 °C)	18 MPa	ISO 527-2
Vicat softening temperature A50 (10 N)	> 130 °C	ISO 306
Charpy Impact Strength, notched (23 °C)	40 kJ/m²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	6 kJ/m²	ISO 179/1eA
Charpy Impact Strength, notched (-30 °C)	5 kJ/m²	ISO 179/1eA
Moisture [1]	< 500 ppm	ISO 15512
Peel strength (3 layer) (23 °C)	> 250 N/cm	ISO 21809-1
Peel strength (3 layer) (80 °C)	> 100 N/cm	ISO 21809-1
Peel strength (3 layer) (110 °C)	> 60 N/cm	ISO 21809-1

[1] Karl Fischer-titration

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

Extrusion

Head	200 - 220 °C
Die	200 - 220 °C
Melt temperature	190 - 220 °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

Storage
Borcoat BB122E-LT 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 be stored for a period of up to 36 months 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.

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"

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Product Management / Albin Mariacher

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.

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