



Polypropylene Bormed™ HD810MO

Description

Bormed HD810MO is a polypropylene homopolymer intended for evaluation for use in Healthcare applications. This nucleated grade with a medium melt flow rate is specially formulated for production of articles which need to be sterilised with radiation (gamma and beta radiation). Tests on specimen radiated at 25 kGy have shown stability for 5 years when stored at room temperature. Material can also well be sterilised with ethylene oxide or steam.

CAS-No. 9003-07-0

Applications

Bormed HD810MO has been evaluated according to different regulations and norms. Typical applications are mentioned below for Medical and Diagnostic devices or Pharmaceutical packaging. However, Borealis should be consulted for final approval to evaluate the use of Bormed HD810MO .

Disposable non pre-filled syringes
Catheter

Blood collection systems
Laboratory disposable

The customer should be aware that Bormed products may only be used in applications which are pre-approved for evaluation by Borealis received in the form of a risk assessment form (RAF) review response. Without such pre-approval, no use of the grade shall be made. In case of doubt, the customer should seek pre-approval for evaluation from Borealis to proceed through their Sales or technical contact. Borealis makes no warranties beyond what is contained in this product datasheet and the customer is responsible for reading and accepting the disclaimer as contained in this product datasheet.

Special Features

Radiation resistance

High transparency

Physical Properties

| Property | Typical Value | Test Method |
|---|-----------------------|-------------|
| <small>Data should not be used for specification work</small> | | |
| Melt Flow Rate (230 °C/2,16 kg) | 10 g/10min | ISO 1133 |
| Flexural Modulus | 1.250 MPa | ISO 178 |
| Tensile Modulus (1 mm/min) | 1.100 MPa | ISO 527-2 |
| Tensile Strain at Yield (50 mm/min) | 13 % | ISO 527-2 |
| Tensile Stress at Yield (50 mm/min) | 29,5 MPa | ISO 527-2 |
| Melting temperature (DSC) | 164 °C | ISO 11357-3 |
| Heat Deflection Temperature (0,45 MPa) | 90 °C | ISO 75-2 |
| Charpy Impact Strength, notched (23 °C) | 4,5 kJ/m ² | ISO 179/1eA |

Bormed is a trademark of the Borealis group.

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Processing Techniques

This product is easy to process with standard injection moulding machines.

Following parameters should be used as guidelines:

| | | |
|-------------------|----------------|------------------------------|
| Melt temperature | 220 - 260 °C | |
| Holding pressure | 200 - 500 bar | Minimum to avoid sink marks. |
| Mould temperature | 30 - 40 °C | |
| Injection speed | Medium to high | |

Shrinkage 1 - 2 %, depending on wall thickness and moulding parameters

Storage

Bormed HD810MO should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Following afore-mentioned conditions the material can be stored for a period of up to 3 years after production. 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. 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.

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

For general and grade specific compliance documents please see Borealis' homepage www.borealisgroup.com or ask your Borealis representative.



Polypropylene
Bormed HD810MO

Issuer:

Marketing Healthcare / Niya Petzold
Product Management / Peter Doshev

Disclaimer

The product(s) mentioned herein are not intended for use as medical implant material or implantable medical devices 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.