

## Polypropylene

# Bormed™ HF840MO

We confirm that this product fulfils the requirements on materials used for the manufacturing of articles or components of articles intended for medical use as described in:

### Council of Europe

Material complies with the following European Pharmacopoeia monographs: Monograph 3.1.3. Polyolefins: Compliance on all other parts of the monograph with exception of the appearance of solution, absorbance and reducing substances tests.

Monograph 3.1.6. Polypropylene for containers and closures for parenteral preparations and ophthalmic preparations: Compliance to all other parts of the monograph with exception of the appearance of solution, absorbance and reducing substances tests.

Tests are made according to the current Pharmacopoeia edition at the time of the testing: 10th edition (2020), and supplement 10.8 (07/2022).

Monograph 3.2.2. Plastic containers and closures for pharmaceutical use: This monograph relates specifically to the container and closure system and does not contain tests that are required for compliance assessment of the raw materials used for said container and closures. The composition of the product is in compliance with this monograph.

### Germany

The product follows the VDI 2017 Guideline on "Medical Grade Plastic" that covers the requirements for change management, quality management, supply security and support for regulatory requirements.

### USA

Material has passed the following United States Pharmacopoeia tests:

Biological reactivity tests - in vitro <87>: Cytotoxicity (Elution test)

Biological reactivity tests - in vivo <88>: Class VI - 70 °C

Physicochemical tests for plastics according to <661>, so far applicable to polymer pellets (with no reference to the specific surface area requirements), including heavy metals, buffering capacity and non-volatile residue test with purified water extract.

Plastic materials of construction <661.1>: Identification, physicochemical tests (with exception of absorbance and total organic carbon tests; please contact your Borealis or Borouge representatives for additional information), and extractable metals tests (as listed in the chapter). Plastic additive tests are done according to Borealis' internal methods.

Tests are made according to the current Pharmacopoeia edition at the time of the testing (USP 37/42/2021).

### Additional testing

Material has been tested according to the following ISO 10993 biological tests, in the extent applicable for polymer pellets:

Cytotoxicity (ISO 10993-5)

Acute systemic toxicity (ISO 10993-11)

Skin irritation / intracutaneous reactivity (ISO 10993-10)

Dermal sensitization (ISO 10993-10)

Hemocompatibility (ISO 10993-4)

Tests are made according to the current ISO 10993 edition at the time of the testing (2019).

### Elemental impurities

During the manufacturing process of this product, we neither use nor intentionally incorporate any Class 1, 2A, 2B or 3 elements as listed in the ICH Q3D(R2) Guideline on Elemental Impurities (May 2022).

### DMF number

Material has been assigned the FDA Drug Master File number(s):  
DMF 009040

### Additional information

If a customer wishes to take advantage of the pre-notice period in case of deletion

Bormed is a trademark of the Borealis group.

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or modification of Bormed grades, such pre-notice period needs to be included in Technical Delivery Specifications.

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**Prepared by** Borealis, Group Product Stewardship

### Disclaimer

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