

Black PE80 Polyethylene compound for pressure pipes

## **Description**

**BorSafe ME3440-W** is a bimodal polyethylene compound produced by the advanced Borstar technology. The product contains a combination of pigments and stabilizers to ensure excellent long-term stability and UV-resistance.

BorSafe ME3440-W is classified as an MRS 8.0 material (PE80).

# **Applications**

BorSafe ME3440-W is recommended for pressure pipe systems in the applications field of:

Drinking water Gas distribution
Industrial Cable protection pipes
Irrigation Relining

Sheets and profiles

# **Specifications**

**BorSafe ME3440-W** is intended to fulfil following standards and regulations, in case of appropriate industrial manufacturing standard procedures applied and a continuous quality system is implemented.

EN 12201 ISO 4427 EN 1555 ISO 4437

EN ISO 15494

**BorSafe ME3440-W** provides an improved performance level in terms of drinking water related requirements such as migration limits. The sensoric properties like taste & odour are regularly monitored for the compound to ensure a high constant level of quality. The material shows excellent mechanical toughness and crack resistance also at lower temperatures. Thanks to the molecular structure, it offers outstanding extrudability and good melt strength, supporting a problem-free extrusion process to tight tolerances.

# **Physical Properties**

Property	Typical Value Test Method Data should not be used for specification work		
Density	954 kg/m³	ISO 1183A	
Melt Flow Rate (190 °C/5,0 kg)	0,8 g/10min	ISO 1133	
Tensile Modulus (1 mm/min)	800 MPa	ISO 527-2	
Tensile Strain at Break	> 600 %	ISO 527-2	
Tensile Stress at Yield (50 mm/min)	20 MPa	ISO 527-2	
Carbon black content	2 - 2,5 %	ISO 6964	
Carbon black dispersion	<= 3	ISO 18553	
Oxidation Induction Time (210 °C)	> 20 min	ISO 11357-6	
Resistance to slow crack growth (8,0 bar, 80 °C)	> 2.000 h	ISO 13479	
Resistance to gas condensate	Pass	EN1555-1	

BorSafe is a trademark of the Borealis group.

Telephone +43 1 224 00 0 | Fax +43 1 22 400 333

Borealis AG | Wagramer Strasse 17-19 | 1220 Vienna | Austria

FN 269858a | CCC Commercial Court of Vienna | Website www.borealisgroup.com





## **Processing Techniques**

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

#### **Extrusion**

 Cylinder
 180 - 210 °C

 Head
 200 - 210 °C

 Die
 200 - 210 °C

 Melt temperature
 200 - 220 °C

For normal conditions and applications we suggest preheating and drying. 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

**BorSafe ME3440-W** 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 aforementioned conditions the material can safely be stored for a period of up to 2 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

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.

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.

### **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"
Statement on compliance to regulations for drinking water pipes
Statement on compliance to food contact regulations





#### Issuer:

Marketing Pipe / Norbert Jansen Product Management / Christian Merz

### **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.

