Polyethylene

BorSafe™ HE3499-LS-H

High Density Polyethylene Colored Stripe Compound for Pressure Pipes

Description

BorSafe HE3499-LS-H is a bimodal polyethylene compound produced by the advanced Borstar technology

The product is a readymade compound, including carefully selected stabilizers to ensure excellent long-term thermal stability and UV-resistance for limited outdoors storage of the final product.

Furthermore, it has a pigment system that gives a bright colored stripe, even when extruded as a thin layer on a black pipe.

Applications

BorSafe™ HE3499-LS-H is intended for following applications:

Drinking water

BorSafe HE3499-LS-H is recommended to extrude identification stripes onto black pipes produced from BorSafe materials. The compound used for the identification stripes is manufactured from a PE BorSafe base polymer for which fusion compatibility has been proven according to part 1 of the EN and ISO PE pressure pipe standards.

The resistance to weathering of the identification stripe compound as a cumulative radiant exposure is > 7 GJ/m² related to the outdoor storage ability limit as the base resin already fulfills this requirement.

Specifications

BorSafe™ HE3499-LS-H and/or articles produced from it, are expected to meet the applicable requirements included in the below mentioned standards provided it is processed using sound material handling and processing practices as well as appropriate testing procedures.

EN 12201 ISO 4427

Thanks to the molecular structure selected, BorSafe HE3499-LS-H offers outstanding extrudability and an easy application of the thin co-extruded stripes onto the black core pipe.

The light blue colour is similar to colour code RAL 5012.

Physical properties

Property	Typical value *	Unit	Test method
Density	954.0	kg/m³	ISO 1183-1
Melt flow rate (190 °C/5 kg)	0.30	g/10min	ISO 1133-1
Oxidation induction time (210 °C)	≥20	min	ISO 11357-6

^{*} Data should not be used for specification work

Processing techniques

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

Processing setting	Typical value/range	
Cylinder temperature	190-210 °C	
Melt temperature	200-220°C °C	

Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. For normal conditions and applications we suggest preheating and drying. Please contact your local Borealis representative for such particulars.

BorSafe $\ensuremath{^{\text{TM}}}$ is a trademark of the Borealis Group



Polyethylene

BorSafe™ HE3499-LS-H

Packaging and storage

BorSafe™ HE3499-LS-H 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 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.

Product compliance documents

Latest versions of product safety information sheets (PSIS), product safety data sheets (SDS) and other product liability documents are available in our website www.borealisgroup.com.

Sustainability aspects

Borealis is ever mindful of the impact of our products on the planet. We promote Design for Circularity (DfC) and Design for Recycling (DfR) to conserve natural resources and to reduce the environmental impact of products over their entire lifetime (including production, use phase and after phase). DfR helps ensure that material can be effectively recycled while maximizing the material performance efficiency.

Further information on sustainability and Design for Recycling (DfR) can be found from our websites www.borealisgroup.com and www.borealiseverminds.com.

Regional Availability

Europe

North America

South America

For information on regional availability please contact Borealis Sales Representative.

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.



BorSafe $^{\text{TM}}$ is a trademark of the Borealis Group

