PRODUCT DATA SHEET

Polyethylene

HE1878E-C3

Crosslinkable PE (PE-X)

Description

HE1878E-C3 is a high molecular weight, high density polyethylene with enhanced chlorine and ultra violet (UV) resistance specially designed for the manufacturing of crosslinked pipes (PE-X).

HE1878E-C3 Is a pelletized material in minipellet form for the PE-Xa, peroxide crosslinking process. The material is fully stabilized for the heating and plumbing application. Crosslinking agent (e.g. peroxide) has to be added by the pipe manufacturer. Good crosslink response and well-balanced pellet size distribution enable effective soaking and a stable pipe production.

Applications

HE1878E-C3 is intended for following applications:

District heating
Domestic water
Heating
Industrial applications
Plumbing
Relining

Specifications

HE1878E-C3 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.

ASTM F876
DIN 16892
DIN 16893
EN ISO 15875

HE1878E-C3 is listed with NSF, PPI and ICC as UV rated PE-Xa resin.

Physical properties

Property	Typical value *	Unit	Test method
Density	953.5	kg/m³	ISO 1183-1
Melt flow rate (190 °C/21.6 kg)	9.2	g/10min	ISO 1133-1
Oxidation induction time (210 °C)	≥50	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. They will also depend on size and wall thickness of the pipe produced.
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 and storage

HE1878E-C3 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 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 on our website www.borealisgroup.com.

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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.

Disclaimer

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