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PRODUCT DATA SHEET

Polyethylene

MG7547S

High Density Polyethylene

Description

MG7547S is a high-density polyethylene produced by a low pressure process.

This grade has an excellent impact strength and low distortion even at low temperatures. It also contains UV-stabilizer, which makes this grade especially suited for outdoor applications.

Typical characteristics

MG7547S can be described with following typical characteristics:

Very good impact strength	Very good toughness
Waste bins	Transport packaging
Crates	

Physical properties

Property	Typical value *	Unit	Test method
Density	954	kg/m³	ISO 1183
Melt flow rate (190 °C/2.16 kg)	4	g/10min	ISO 1133-1
Tensile modulus (1 mm/min) [1]	950	MPa	ISO 527-2
Tensile stress at yield (50 mm/min) [1]	24	MPa	ISO 527-2
Tensile strain at yield (50 mm/min) [1]	10	%	ISO 527-2
Charpy impact strength, notched (23 °C) [2]	11	kJ/m²	ISO 179 1eA
Charpy impact strength, notched (-20 °C) [2]	7	kJ/m²	ISO 179 1eA
Heat deflection temperature B (0.45 MPa) [3]	71	°C	ISO 75-2
Hardness, Shore D	61	-	ISO 868

* Data should not be used for specification work

[1] *Measured on injection moulded specimens acc. to ISO 1872-2*
[2] *ISO 179/1eA*
[3] *Measured on injection moulded specimens acc. to ISO 1873-2*

Processing techniques

Following parameters should be used as guidelines:

Processing setting	Typical value/range
Melt temperature	210 - 275 °C
Holding pressure [4]	As low as possible
Mould temperature	10 - 40 °C
Injection speed	As high as possible.

[4] *Minimum to avoid sink marks.*

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

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Packaging and storage

MG7547S should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which can result in odour generation and colour changes and can have negative effects on the physical properties of this product.

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.

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