Technical Data Sheet

Icorene 1480 NAT

High Density Polyethylene

Product Description

Icorene 1480 is a UV stabilised hexene high density polyethylene specifically developed for use in rotational moulding. This grade is typically used by customers to manufacture large tanks, boats and also underground infrastructure parts. *Icorene* 1480 has a wide processing window very good flow, great ESCR and impact strength (especially at low temperatures). This fast melting grade is designed to reduce oven cycle time and use less gas or energy in heating, which can lead to shorter cooling times. It can be moulded to lower than typical PIATs. It is not intended for use in medical and pharmaceutical applications.

Regulatory Status

For regulatory compliance information, see *Icorene* 1480 NAT Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	Europe
Processing Method	Rotomolding
Attribute	Fast Molding Cycle; High ESCR (Environmental Stress Cracking Resistance); High Rigidity; High Toughness; Low Temperature Impact Resistance; UV Resistant
Forms	Powder
Appearance	Natural Color
Additive	Antioxidant; UV Stabilizer
Application	Agricultural Tanks; Tanks

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	6.0	g/10 min	ISO 1133
Density	0.940	g/cm³	ISO 1183
Mechanical			
Tensile Modulus	770	MPa	ISO 527
Tensile Strength at Yield	19.0	MPa	ISO 527-1
Flexural Modulus	790	MPa	ISO 178
Tensile Strain at Yield	9.0	%	ISO 527-1
Tensile Strain at Break	>450	%	ISO 527-1
Environmental Stress Crack Resistance			
(Condition B, F50, 10% Igepal, 50 °C)	>1000	hr	ASTM D1693
(Condition B, F50, 100% Igepal, 50 °C)	>1000	hr	ASTM D1693
Impact			
Impact Strength, (-40 °C, 3.20 mm, Rotational Molded)	>75	J	ARM
Hardness			
Shore Hardness, (Shore D, Rotational Molded)	58		ISO 868
Thermal			
Deflection Temperature Under Load Unannealed (0.45 MPa)	>66	°C	ISO 75-2/B
Melting Temperature	127	°C	DSC

Manufacturer website: https://www.lyondellbasell.com/en/

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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