

Technical Data Sheet

Icorene 1613 GRY 7770



Polyethylene, Linear Medium Density

Product Description

Icorene 1613 is a hexene linear medium density polyethylene specifically developed for use in rotational moulding. This grade is designed for applications requiring good processability, stiffness and toughness. The constituents of this product are suitable for food contact applications. *Icorene* 1613 is TÜV approved, protocolnr 175XS0124-00.

Regulatory Status

For regulatory compliance information, see *Icorene* 1613 GRY 7770 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	Europe
Processing Method	Rotomolding
Attribute	Good Impact Resistance; Good Processability; Good Stiffness; Good Toughness; Hexene Comonomer; UV Resistant
Forms	Powder
Appearance	Natural Color; Unspecified Color
Additive	UV Stabilizer
Application	Tanks

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	4.5	g/10 min	ISO 1133
Density, (23 °C)	0.938	g/cm ³	ISO 1183
Mechanical			
Tensile Strength at Yield, (23 °C, 3.20 mm, Rotational Molded)	20.0	MPa	ISO 527-1
Environmental Stress Crack Resistance			
(Condition B, F50, 10% Igepal, 50 °C)	>250	hr	ASTM D1693
(Condition B, F50, 100% Igepal, 50 °C)	>1000	hr	ASTM D1693
Flexural Modulus, (23 °C)	750	MPa	ISO 178
Tensile Elongation at Break, (Rotational Molded)	>1000	%	ISO 527-1
Impact			
Drop Impact Resistance, (-20 °C, Internal Method)	>200	J/cm	ASTM D4226
Hardness			
Shore Hardness, (Shore D)	62		ISO 868
Thermal			
Vicat Softening Temperature, (A (10N))	117	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa)	65	°C	ISO 75-2/B
Melting Temperature	127	°C	ISO 11357-3

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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