

Technical Data Sheet



Icorene 1460 GRY 7907

Medium Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® 1460 GRY 7907 is a hexene medium density polyethylene compound grey colour specifically developed for use in rotational moulding.

This grade is designed for use in agriculture and chemical storage containers, technical parts and automotive parts. Also this grade is resistant against the harmful effect of biodiesel fuel.

ICORENE® 1460 GRY7907 has good overall mouldability, extremely high ESCR and impact strength (especially at low temperatures).

General

Material Status	• Commercial: Active		
Availability	• Europe		
Additive	• Antioxidant	• UV Stabilizer	
Features	• Good Moldability • Good Toughness	• High ESCR (Stress Crack Resist.) • Low Temperature Impact Resistance	• UV Resistant
Uses	• Automotive Exterior Parts	• Industrial Containers	
Appearance	• Grey		
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.936 g/cm ³	0.936 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	7.5 g/10 min	7.5 g/10 min	ISO 1133
Environmental Stress-Cracking Resistance (ESCR) 122°F (50°C), 10% Igepal, F50	> 1000 hr	> 1000 hr	ASTM D1693B
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	102000 psi	700 MPa	ISO 527
Tensile Strength (Yield)	2470 psi	17.0 MPa	ISO 527-1
Tensile Strain			ISO 527-1
Yield	10 %	10 %	
Break	> 450 %	> 450 %	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength			ISO 8256/A
-22°F (-30°C)	49.5 ft·lb/in ²	104 kJ/m ²	
73°F (23°C)	101 ft·lb/in ²	213 kJ/m ²	
Impact Strength			ARM
-40°F (-40°C), 0.118 in (3.00 mm), Rotational Molded	> 55 ft·lb	> 75 J	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Shore Hardness (Shore D, Rotational Molded)	56	56	ISO 868
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	235 °F	113 °C	ISO 306/A50

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.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

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Company Information

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

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