

Technical Data Sheet

**Icorene 1460 Black 9001**

Linear Polyethylene Copolymer
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® 1460 Black 9001 is a UV stabilised hexene linear medium density polyethylene specifically developed for use in rotational moulding.

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

ICORENE® 1460 Black 9001 has good overall mouldability, extremely high ESCR and impact strength (especially at low temperatures).

It is not intended for use in medical and pharmaceutical applications.

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	• General Purpose	• Industrial Containers
Appearance	• Black		
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)			ASTM D1693B
122°F (50°C), 10% Igepal, F50	> 5000 hr	> 5000 hr	
122°F (50°C), 100% Igepal, F50	> 10000 hr	> 10000 hr	
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	> 650 %	> 650 %	
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 ¹			ARM
-40°F (-40°C), 0.126 in (3.20 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

¹ 100% ductile at PIAT 180C 3.2mm at -20C and -40C

Notes

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

Processing Techniques

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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

Company Information

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

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