

Technical Data Sheet

**Icorene 1505 BLACK 9001**

Crosslinked Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® 1505 Black 9001 is a crosslinkable black high density polyethylene specifically developed for rotational moulding.

This grade is particularly suitable for use in applications requiring exceptional impact resistance at low temperature, toughness and excellent ESCR such as fuel tanks.

The original cross linking system used is low odor and allows a perfect moulding of the part free of pinholes.

ICORENE® 1505 Black 9001 is TÜV approved, protocolnr 163XS0034-00.

General

Material Status	• Commercial: Active		
Availability	• Europe		
Additive	• UV Stabilizer		
Features	• Crosslinkable • Good Processability	• High ESCR (Stress Crack Resist.) • High Impact Resistance	• Low Odor • UV Resistant
Uses	• Industrial Containers		
Appearance	• Black		
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.943 g/cm ³	0.943 g/cm ³	ASTM D1505
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F (50°C), 10% Igepal	> 1000 hr	> 1000 hr	
122°F (50°C), 100% Antarox, Rotational Molded, F50	> 1000 hr	> 1000 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	3050 psi	21.0 MPa	ASTM D638
Tensile Elongation (Break)	600 %	600 %	ASTM D638
Flexural Modulus	102000 psi	700 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Drop Impact Resistance			ARM
-40°F (-40°C), 0.126 in (3.20 mm)	7.19 in·lb/mil	320 J/cm	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed	109 °F	43.0 °C	
Vicat Softening Temperature	261 °F	127 °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

Company Information

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

© LyondellBasell Industries Holdings, B.V. 2024

Page: 1 of 2
LyondellBasell

www.lyondellbasell.com
Publish Date: 2024-03-14

Technical Data Sheet

**Icorene 1505 BLACK 9001**

Crosslinked Polyethylene
LyondellBasell Industries
Rotomolding

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.