

Technical Data Sheet

Icorene 1314

High Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® 1314 is a high performance hexene high density polyethylene specifically developed for use in rotational moulding.

This grade has been designed for applications requiring good stiffness and toughness.

This material can be used in many different rotomoulding applications and for food contact applications.

ICORENE® 1314 Black 9001 is TÜV approved, protocolnr 175XS0122-00.

ICORENE® 1314 Natural and Black are DiBt approved Z40-25-519 and WRAS approved: 1507503 & 1202543

General

Additive	• UV Stabilizer		
Features	• Food Contact Acceptable • Good Impact Resistance • Good Stiffness	• Good Toughness • Hexene Comonomer • High ESCR (Stress Crack Resist.)	• UV Resistant
Uses	• Fuel Tanks • Industrial Tanks	• Septic Tanks • Tanks	
Appearance	• Natural Color	• Unspecified Color	
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.939 g/cm³	0.939 g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 Kg)	3.0 g/10 min	3.0 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 122°F (50°C), 100% Igepal	> 1000 hr	> 1000 hr	ASTM D1693
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield, 73°F (23°C))	2900 psi	20.0 MPa	ISO 527
Tensile Elongation (Break)	> 1000 %	> 1000 %	ASTM D638
Flexural Modulus (73°F (23°C))	116000 psi	800 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Drop Impact Resistance ² (-4°F (-20°C))	> 4.50 in·lb/mil	> 200 J/cm	Internal Method
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	62	62	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 Psi (0.45 Mpa), Unannealed	153 °F	67.0 °C	ISO 75-2/B
Vicat Softening Temperature	243 °F	117 °C	ISO 306/A
Melting Temperature	261 °F	127 °C	ISO 11357-3

Notes

¹ Type I

² based on ISO 6603

Notes

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