

Technical Data Sheet

Icorene 1314 GRN 6111



High Density Polyethylene

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

Processing Method	Rotomolding
Attribute	Good Impact Resistance; Good Stiffness; Good Toughness; Hexene Comonomer; High ESCR (Environmental Stress Cracking Resistance); UV Resistant
Forms	Powder
Appearance	Black; Natural Color; Unspecified Color
Additive	UV Stabilizer
Application	Fuel Tanks; Septic Tanks; Tanks; Tanks, Industrial

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	3.0	g/10 min	ASTM D1238
Density	0.939	g/cm ³	ASTM D1505
Mechanical			
Tensile Strength at Yield, (23 °C, Type I)	20.0	MPa	ISO 527
Environmental Stress Crack Resistance			
(Condition B, F50, 10% Igepal, 50 °C)	>300	hr	ASTM D1693
(Condition B, F50, 100% Igepal, 50 °C)	>1000	hr	ASTM D1693
Flexural Modulus, (23 °C)	800	MPa	ISO 178
Tensile Elongation at Break, (23 °C)	>1000	%	ISO 527
Impact			
Drop Impact Resistance			
(-40 °C, Rotomoulding)	>210	J/cm	ARM
(-20 °C, Rotomoulding, Internal Method)	>200	J/cm	ASTM D4226
Hardness			
Durometer Hardness, (Shore D)	62		ASTM D2240
Thermal			
Vicat Softening Temperature, (A (10N))	117	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa)	67	°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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