

## 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

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

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate, (190 °C/2.16 kg)	3.0	g/10 min	ASTM D1238
Density	0.939	g/cm <sup>3</sup>	ASTM D1505
<b>Mechanical</b>			
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
<b>Impact</b>			
Drop Impact Resistance			
(-40 °C, Rotomoulding)	>210	J/cm	ARM
(-20 °C, Rotomoulding, Internal Method)	>200	J/cm	ASTM D4226
<b>Hardness</b>			
Durometer Hardness, (Shore D)	62		ASTM D2240
<b>Thermal</b>			
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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