

## Technical Data Sheet

*Icorene* 1460 BLK 9001

Polyethylene Copolymer, Linear

**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.

<b>Processing Method</b>	Rotomolding
<b>Attribute</b>	Good Moldability; Good Toughness; High ESCR (Environmental Stress Cracking Resistance); Low Temperature Impact Resistance; UV Resistant
<b>Forms</b>	Powder
<b>Appearance</b>	Black
<b>Additive</b>	Antioxidant; UV Stabilizer
<b>Application</b>	Automotive Exterior Parts; General Purpose; Industrial Containers

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate, (190 °C/2.16 kg)	7.5	g/10 min	ISO 1133
Density	0.936	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical</b>			
Tensile Strength at Yield	17.0	MPa	ISO 527-1
Environmental Stress Crack Resistance			
(Condition B, F50, 10% Igepal, 50 °C)	>5000	hr	ASTM D1693
(Condition B, F50, 100% Igepal, 50 °C)	>10000	hr	ASTM D1693
Tensile Strain at Break	>650	%	ISO 527-1
Tensile Strain at Yield	10	%	ISO 527-1
Tensile Modulus	700	MPa	ISO 527
<b>Impact</b>			
Impact Strength, (-40 °C, 3.20 mm, Rotational Molded)	>75	J	ARM
Tensile Impact Strength			
(Method A, -30 °C)	104	kJ/m <sup>2</sup>	ISO 8256
(Method A, 23 °C)	213	kJ/m <sup>2</sup>	ISO 8256
<b>Hardness</b>			
Shore Hardness, (Shore D, Rotational Molded)	56		ISO 868
<b>Thermal</b>			
Vicat Softening Temperature, (A (10N), 50 °C/h)	113	°C	ISO 306