

Safrene® M 7650 High Density Polyethylene Resin is a high molecular mass grade suitable for extrusion blow moulding of containers greater than 20 litre capacities. It has a high rigidity and hardness with very good impact strength and environmental stress-crack resistance properties.

Safrene® M 7650 High Density Polyethylene Resin is primarily designed for the blow moulding of large hollow articles but may be used for smaller mouldings where exceptional environmental stress-crack resistance and impact strength are required.

### Typical Applications

- General purpose containers
- Sheet extrusion
- Optical fibre sheathing

PROPERTIES <sup>(1)</sup>	VALUE	UNIT	TEST METHOD
<b>Physical</b>			
Melt Flow Rate, 190 °C/ 5 kg	0.35	g/10min	ISO 1133
Melt Flow Rate, 190 °C/ 21.6 kg	9.5	g/10min	ISO 1133
Density <sup>(2)</sup>	0.953	g/cm <sup>3</sup>	ISO 1183
Viscosity Number	350	cm <sup>3</sup> /g	ISO 1628-3
<b>Mechanical<sup>(3)</sup></b>			
Hardness Shore D	62	Units	ISO 868
Tensile Yield <sup>(4)</sup>	26	MPa	ISO 527
Ultimate Tensile <sup>(4)</sup>	40	MPa	ISO 527
Ultimate Elongation <sup>(4)</sup>	>600	%	ISO 527
Flexural Stress (3.5% Deflection)	22	MPa	ISO 178
<b>Impact<sup>(3)</sup></b>			
Charpy Notched Impact Strength (23 °C)	23	kJ/m <sup>2</sup>	ISO 179
Charpy Notched Impact Strength (-30 °C)	20	kJ/m <sup>2</sup>	ISO 179
<b>Thermal</b>			
Vicat Softening Point, Load 5kg	80	°C	ISO 306
Crystalline Melting Range	130-133	°C	ISO 3146-85

(1) Typical values; not to be construed as specification limits.

(2) Unannealed

(3) Compression moulded samples

(4) Test speed 50 mm/min

Typical processing conditions	Blow Moulding
Feed Zone (°C)	180
Zone1 (°C)	190 - 200
Zone 2 (°C)	200 - 210
Zone 3 (°C)	200
Die (°C)	200
Melt Temp (°C)	200

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<b>Food Contact Compliance</b>	<p>Safrene® M 7650 High Density Polyethylene Resin should comply with Commission Regulation (EU) No 10/2011 and with U.S. FDA 21 CFR 177.1520(c)3.1c food contact regulations when used unmodified and processed according to good manufacturing practices for food contact applications. The purchaser remains responsible for determining whether the use complies with all relevant regulations.</p>
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### Additional Information

**Our contact details**

Safrapol (Pty) Ltd  
Private Bag X 52  
Bryanston  
2021  
South Africa

**Website:** [www.safrapol.com](http://www.safrapol.com)

**Published:**

**Gauteng:**

Tel: +27 (0) 11 575 4549  
Fax: +27 (0) 11 576 4549

**Kwa-Zulu Natal:**

Tel: +27 (0) 31 469-0696  
Fax: +27 (0) 31 469-0694

**Email:** [info@safrapol.com](mailto:info@safrapol.com)

October 2011