

**Safrene®** (High Density PolyEthylene)

**Technical Data Sheet**
**F 7650**
**High Density Polyethylene for Blow Moulding Applications**

Safrene® F 7650 High Density Polyethylene Resin is a bimodal medium molecular mass grade with good processing properties. It exhibits good impact strength and excellent environmental stress-crack resistance.

Safrene® F 7650 High Density Polyethylene Resin is recommended for all general purpose applications up to 20 litre in volume.

**Typical Applications**

- Toiletry containers
- General purpose containers
- Household and industrial chemical containers

PROPERTIES <sup>(1)</sup>	VALUE	UNIT	TEST METHOD
<b>Physical</b>			
Melt Flow Rate, 190 °C/ 5 kg	1.7	g/10min	ISO 1133
Melt Flow Rate, 190 °C/ 2.16 kg	0.33	g/10min	ISO 1133
Density <sup>(2)</sup>	0.950	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical</b> <sup>(3)</sup>			
Hardness Shore D	62	Units	ISO 868
Tensile Yield <sup>(4)</sup>	23	MPa	ISO 527
Ultimate Tensile <sup>(4)</sup>	36	MPa	ISO 527
Ultimate Elongation <sup>(4)</sup>	>600	%	ISO 527
Flexural Modulus	1200	MPa	ISO 178
Environmental Stress-Crack Resistance <sup>(5)</sup>	>1000	hours	ASTM D1693
<b>Impact</b> <sup>(3)</sup>			
Charpy Notched Impact Strength (23 °C)	11	kJ/m <sup>2</sup>	ISO 179
Charpy Notched Impact Strength (-30 °C)	8	kJ/m <sup>2</sup>	ISO 179
<b>Thermal</b>			
Vicat Softening Point (10N)	126	°C	ISO 306/A50
Vicat Softening Point (50N)	70	°C	ISO 306/B50
Crystalline Melting Range	130-133	°C	ISO 3146

<sup>(1)</sup> Typical values; not to be construed as specification limits.

<sup>(2)</sup> Unannealed

<sup>(3)</sup> Compression moulded samples

<sup>(4)</sup> Test speed 50 mm/min

<sup>(5)</sup> Bell test condition B, 50°C, 10% Igepal, F50.

Typical processing conditions	Blow Moulding
Feed Zone (°C)	160 - 180
Zone1 (°C)	170 - 190
Zone 2 (°C)	180 - 200
Zone 3 (°C)	180 - 190
Die (°C)	180 - 190
Melt Temp (°C)	180 - 190

**F 7650**

**High Density Polyethylene for Blow Moulding Applications**

<p>Product Stewardship</p>	<p>At Safripol®, protecting people and the environment will be a part of everything we do and every decision we make. Each employee has a primary responsibility in ensuring that our products and operations meet applicable government standards.</p> <p>Our goal is to eliminate all injuries, prevent adverse environment and health impacts, reduce wastes and emissions and promote resource conservation at every stage of the life cycle of our products. The success of this rests with each and every individual involved with Safripol® products throughout the life cycle.</p>
<p>Food Contact Compliance</p>	<p>Safrene® F 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>
<p>Customer Notice</p>	<p>Safripol® strongly encourages its customers to review both their manufacturing processes and their applications of Safripol® products from the standpoint of human health and environmental quality to ensure that Safripol® products are not used in ways for which they are not intended or tested. Safripol® personnel are available to answer your questions and to provide reasonable technical support. Safripol® product literature, including safety data sheets, should be consulted prior to use of Safripol® products. Current safety data sheets are available from Safripol®.</p>
<p>Safripol Medical Application Policy</p>	<p>Safripol® will not knowingly sell or sample any product or service ("Product") into any commercial or developmental application that is intended for:</p> <ol style="list-style-type: none"> <li>permanent (Long term) contact with internal body fluids or internal body tissues. Long term is a use which exceeds 72 continuous hours.</li> <li>use in cardiac prosthetic devices regardless of the length of time involved; (Cardiac prosthetic devices include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass assisted devices);</li> <li>use as a critical component in medical devices that support or sustain human life; or</li> <li>use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction.</li> </ol> <p>Additionally, all Products intended for use in pharmaceutical applications, other than pharmaceutical packaging, must pass the current Pharmaceutical Liability Guidelines.</p> <ul style="list-style-type: none"> <li>New business opportunities require a business assessment prior to sale or sampling of Safripol® products.</li> <li>Authorized distributors and resellers will adhere to this medical policy.</li> <li>Safripol® does not endorse or claim suitability of their products for specific medical applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that the Safripol® product is safe, lawful, and technically suitable for the intended use. SAFRIPOL® MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF ANY SAFRIPOL® PRODUCT FOR USE IN MEDICAL APPLICATIONS.</li> </ul>
<p>Disclaimer</p>	<p>The Customer is responsible for determining whether products and the information in this document are appropriate for the Customer's use and for ensuring that the Customer's workplace and disposal/ recycling practices of our products and packaging are in compliance with applicable laws and other governmental enactments. Safripol® assumes no obligation or liability for the information in this document.</p> <p><b>NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.</b></p> <p>NOTICE: If products are described as "experimental" or "developmental": (1) product specifications may not be fully determined; (2) analysis of hazards and caution in handling and use are required; and (3) there is greater potential for Safripol® to change specifications and/or discontinue production.</p>

**Additional Information**

**Our contact details**

Safripol a division of KAP Diversified Industrial (Pty) Ltd\*  
Private Bag X 52  
Bryanston  
2021  
South Africa

**Gauteng:**  
Tel: +27 (0) 11 575 4549

**Kwa-Zulu Natal:**  
Tel: +27 (0) 31 450 4111

Website: [www.safripol.com](http://www.safripol.com)

Email: [info@safripol.com](mailto:info@safripol.com)

Published:

July 2018