

# Safrene® (High Density PolyEthylene)

## F 7740F4

### High-Density Polyethylene for Extrusion Applications

Safrene® F 7740F4 High Density Polyethylene Resin is a medium molecular mass extrusion grade ideally suited to the extrusion and subsequent knitting of tapes and monofilaments typically used in agricultural pockets and shade netting.

Safrene® F 7740F4 High Density Polyethylene Resin is also used for film extrusion applications where excellent roll geometry is required. As a film it exhibits an excellent barrier to moisture.

Safrene® F 7740F4 High Density Polyethylene Resin contains an optimized additive package.

### Typical Applications

- Monofilaments
- Stretched tapes
- Films for laminating
- Co-extruded films
- Drip-bag over pouches

| PROPERTIES <sup>(1)</sup>          | VALUE     | UNIT              | TEST METHOD |
|------------------------------------|-----------|-------------------|-------------|
| <b>Physical</b>                    |           |                   |             |
| Melt Flow Rate, 190 °C/ 5 kg       | 1.5       | g/10min           | ISO 1133    |
| Density <sup>(2)</sup>             | 0.947     | g/cm <sup>3</sup> | ISO 1183    |
| <b>Mechanical<sup>(3)</sup></b>    |           |                   |             |
| Tensile Yield <sup>(4)</sup>       | 21        | MPa               | ISO 527     |
| Ultimate Tensile <sup>(4)</sup>    | 33        | MPa               | ISO 527     |
| Ultimate Elongation <sup>(4)</sup> | >600      | %                 | ISO 527     |
| <b>Thermal</b>                     |           |                   |             |
| 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 50mm/min.

| Typical Processing Conditions | Extrusion |
|-------------------------------|-----------|
| Feed Zone (°C)                | 170       |
| Die (°C)                      | 230 - 260 |
| Melt Temp (°C)                | 210 - 240 |

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## Technical Data Sheet

**F 7740F4**

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| <p><b>Product Stewardship</b></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. 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><b>Food Contact Compliance</b></p>  | <p>Safrene® F 7740F4 High Density Polyethylene Resin should comply with Commission Regulation (EU) No 10/2011 and with U.S. FDA 21 CFR 177.1520(c)3.2a 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><b>Customer Notice</b></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>  |
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| <p><b>Additional Information</b></p>   |   |
| <p>Our contact details:</p> <p>Safripol (Pty) Ltd<br/>PrivateBag X 52 Bryanston<br/>2021<br/>South Africa</p> <p>Website: <a href="http://www.safripol.com">www.safripol.com</a></p> <p>Published:</p> | <p><b>Gauteng:</b><br/>Tel: +27 (0) 11 575 4549</p> <p><b>Kwa-Zulu Natal:</b><br/>Tel: +27 (0) 450 4111</p> <p>Email: <a href="mailto:info@safripol.com">info@safripol.com</a></p> <p>January 2022</p>  |