

## Safrene® (High Density PolyEthylene)

### Technical Data Sheet

#### F 7740F2

#### High Density Polyethylene

Safrene® F 7740F2 High Density Polyethylene Resin is a medium molecular weight grade ideally suited to the extrusion and subsequent knitting of tapes and monofilaments typically used in agricultural pockets and shade netting.

Safrene® F 7740F2 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 7740F2 High Density Polyethylene Resin contains slip and antistatic additives.

#### Typical Applications

- Monofilaments
- Stretched tapes
- Films for lamination
- 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	1.9	g/10min	ISO 1133
Melt Flow Rate, 190 °C/ 2.16 kg	0.4	g/10min	ISO 1133
Density <sup>(2)</sup>	0.946	g/cm <sup>3</sup>	ISO 1183
Viscosity Number	270	cm <sup>3</sup> /g	ISO 1628-3
Spiral Flow Test	32	cm	Internal
<b>Mechanical<sup>(3)</sup></b>			
Hardness Shore D	60	Units	ISO 868
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
Flexural Modulus (3.5% Deflection)	17	MPa	ISO 178
<b>Impact<sup>(3)</sup></b>			
Charpy Notched Impact Strength (23 °C)	15	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 B (50N)	73	°C	ISO 306B
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	Film Extrusion
Feed Zone (°C)	170	170
Die (°C)	250 - 260	210 - 220
Melt Temp (°C)	210 - 250	190 - 240

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<b>Product Stewardship</b>	<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>
<b>Food Contact Compliance</b>	<p>Safrene® F 7740F2 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**

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