

Safrene® (High Density PolyEthylene)

Technical Data Sheet
F 7740F2
High Density Polyethylene for General Extrusion Applications

Safrene® F 7740F2 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 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 laminating
- Co-extruded films
- Drip-bag over pouches

PROPERTIES ⁽¹⁾	VALUE	UNIT	TEST METHOD
Physical			
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 ⁽²⁾	0.946	g/cm ³	ISO 1183
Viscosity Number	270	cm ³ /g	ISO 1628-3
Spiral Flow Test	32	cm	Internal
Mechanical ⁽³⁾			
Hardness Shore D	60	Units	ISO 868
Tensile Yield ⁽⁴⁾	21	MPa	ISO 527
Ultimate Tensile ⁽⁴⁾	33	MPa	ISO 527
Ultimate Elongation ⁽⁴⁾	>600	%	ISO 527
Flexural Stress (3.5% Deflection)	17	MPa	ISO 178
Impact ⁽³⁾			
Charpy Notched Impact Strength (23 °C)	15	kJ/m ²	ISO 179
Charpy Notched Impact Strength (-30 °C)	8	kJ/m ²	ISO 179
Thermal			
Vicat Softening Point, Load 5kg	73	°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	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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<p>Food Contact Compliance</p>	<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)3.2a 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>
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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

Email: info@safripol.com

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