

**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 <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</b> <sup>(3)</sup>			
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 Stress (3.5% Deflection)	17	MPa	ISO 178
<b>Impact</b> <sup>(3)</sup>			
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, Load 5kg	73	°C	ISO 306
Crystalline Melting Range	130-133	°C	ISO 3146-85

<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

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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