

Safrene® (High Density PolyEthylene)

Technical Data Sheet
B 7750
High Density Polyethylene for Injection Moulding Applications

Safrene® B 7750 High Density Polyethylene Resin is a high flow injection moulding grade with excellent impact strength, high rigidity and good environmental stress-crack resistance. Good processability balanced with good stiffness and toughness make this grade suited for the production of caps and closures for food and non-food applications.

Typical Applications

- Caps and closures
- Tube shoulders
- Buckets
- Domestic ware

PROPERTIES ⁽¹⁾	VALUE	UNIT	TEST METHOD
Physical			
Melt Flow Rate, 190 °C/ 5 kg	28	g/10min	ISO 1133
Melt Flow Rate, 190 °C/ 2.16 kg	9	g/10min	ISO 1133
Density ⁽²⁾	0.952	g/cm ³	ISO 1183
Spiral Flow Test	50	cm	Internal
Mechanical ⁽³⁾			
Hardness Shore D	62	Units	ISO 868
Tensile Stress at Yield ⁽⁴⁾	28	MPa	ISO 527
Tensile Stress at Break ⁽⁴⁾	21	MPa	ISO 527
Tensile Strain at Yield ⁽⁴⁾	11	%	ISO 527
Tensile Strain at Break ⁽⁴⁾	>600	%	ISO 527
Flexural Modulus	1250	MPa	ISO 178
Impact ⁽³⁾			
Charpy Notched Impact Strength (23 °C)	4	kJ/m ²	ISO 179
Charpy Notched Impact Strength (-30 °C)	4	kJ/m ²	ISO 179
Thermal			
Vicat Softening Point (10N)	123	°C	ISO 306/A50
Vicat Softening Point (50N)	70	°C	ISO 306/B50
Crystalline Melting Range	130-133	°C	ISO 3146

⁽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	Injection Moulding
Melt Temp (°C)	200 - 260

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Product Stewardship	<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>
Food Contact Compliance	<p>Safrene® B 7750 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>
Customer Notice	<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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Additional Information

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