

Safrene® (High Density PolyEthylene)

Technical Data Sheet
D 7255
High Density Polyethylene for Injection Moulding Applications

Safrene® D 7255 High Density Polyethylene Resin is an injection moulding grade with good mechanical strength, high stiffness, good environmental stress-crack resistance and low distortion tendency. It is particularly suitable for durable thick walled articles.

Typical Applications

- Open crates
- Refuse bins
- Open drums
- Other thick walled articles, e.g. Closures

PROPERTIES ⁽¹⁾	VALUE	UNIT	TEST METHOD
Physical			
Melt Flow Rate, 190 °C/ 5 kg	11	g/10min	ISO 1133
Melt Flow Rate, 190 °C/ 2.16 kg	3	g/10min	ISO 1133
Density ⁽²⁾	0.949	g/cm ³	ISO 1183
Viscosity Number	160	cm ³ /g	ISO 1628-3
Spiral Flow Test	39	cm	Internal
Mechanical ⁽³⁾			
Hardness Shore D	64	Units	ISO 868
Tensile Yield ⁽⁴⁾	26	MPa	ISO 527
Ultimate Tensile ⁽⁴⁾	30	MPa	ISO 527
Ultimate Elongation ⁽⁴⁾	>600	%	ISO 527
Flexural Stress (3.5% Deflection)	22	MPa	ISO 178
Impact ⁽³⁾			
Charpy Notched Impact Strength (23 °C)	5	kJ/m ²	ISO 179
Charpy Notched Impact Strength (-30 °C)	5	kJ/m ²	ISO 179
Thermal			
Vicat Softening Point, Load 5kg	70	°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	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® D 7255 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

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