

Safrene® F 7660 High Density Polyethylene Resin is a medium molecular mass grade with good processing properties. It exhibits a good surface finish with high hardness and rigidity.

Safrene® F 7660 High Density Polyethylene Resin is recommended for milk and fruit juice bottles as well as other general purpose bottle applications up to 5 litre where good stiffness is required but environmental stress-crack resistance is not critical.

Typical Applications

- Milk and fruit juice containers
- Toiletry containers
- Household goods containers

| PROPERTIES ⁽¹⁾ | VALUE | UNIT | TEST METHOD |
|---|---------|--------------------|-------------|
| Physical | | | |
| Melt Flow Rate, 190 °C/ 5 kg | 2.0 | g/10min | ISO 1133 |
| Melt Flow Rate, 190 °C/ 2.16 kg | 0.45 | g/10min | ISO 1133 |
| Density ⁽²⁾ | 0.956 | g/cm ³ | ISO 1183 |
| Viscosity Number | 280 | cm ³ /g | ISO 1628-3 |
| Spiral Flow Test | 33 | cm | Internal |
| Mechanical ⁽³⁾ | | | |
| Hardness Shore D | 64 | Units | ISO 868 |
| Tensile Yield ⁽⁴⁾ | 27 | MPa | ISO 527 |
| Ultimate Tensile ⁽⁴⁾ | 38 | 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) | 11 | kJ/m ² | ISO 179 |
| Charpy Notched Impact Strength (-30 °C) | 8 | kJ/m ² | ISO 179 |
| Thermal | | | |
| Vicat Softening Point, Load 5kg | 77 | °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 | Blow Moulding |
|-------------------------------|---------------|
| Feed Zone (°C) | 160 - 180 |
| Zone1 (°C) | 170 - 190 |
| Zone 2 (°C) | 180 - 200 |
| Zone 3 (°C) | 180 - 190 |
| Die (°C) | 190 - 200 |
| Melt Temp (°C) | 180 - 190 |

F 7660

High Density Polyethylene for Blow Moulding Applications

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| Product Stewardship | <p>At Safrapol, 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 Safrapol products throughout the life cycle.</p> |
| Food Contact Compliance | <p>Safrene® F 7660 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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