

Technical Data Sheet

Advance 400[®]

Natural Polypropylene Random Copolymer

Advance 400[®] Polypropylene Resin is a random copolymer developed for thin wall injection moulding applications. It is a controlled rheology grade characterized by excellent optical properties, improved yellowness index and a good balance of stiffness and impact strength at ambient temperatures.

Advance 400[®] Polypropylene Resin contains an antistatic additive.

Typical Applications

- Thin wall packaging
- Food containers
- Cosmetic containers
- Aerosol dust covers

PROPERTIES ⁽¹⁾	VALUE	UNIT	TEST METHOD
Physical			
Melt Flow Rate, 230 °C/ 2.16 kg	40	g/10min	ISO 1133
Density	0.902	g/cm ³	ISO 1183
Mechanical ⁽²⁾			
Tensile Strength at Yield	28	MPa	ISO 527
Elongation at Yield	11	%	ISO 527
Flexural Modulus	1000	MPa	ISO 178
Thermal ⁽²⁾			
Heat Deflection Temperature – HDT A (1.8 MPa)	47	°C	ISO 75/A
Heat Deflection Temperature – HDT B (0.45 MPa)	67	°C	ISO 75/B
Vicat Softening Point A (10 N)	127	°C	ISO 306/A
Vicat Softening Point B (50 N)	70	°C	ISO 306/B
Impact ⁽²⁾			
Charpy Notched Impact Strength (23 °C)	5	kJ/m ²	ISO 179
Charpy Notched Impact Strength (0 °C)	2	kJ/m ²	ISO 179
Optical ⁽²⁾			
Clarity	85	%	ASTM D1003

⁽¹⁾ Typical values; not to be construed as specification limits.

⁽²⁾ Injection Moulded specimens

Typical processing conditions	Injection Moulding
Zone 1 (°C)	180 – 200
Zone 2 (°C)	200 – 220
Zone 3 (°C)	210 – 230
Zone 4 (°C)	225
Nozzle (°C)	215

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<p>Product Stewardship</p>	<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>
<p>Food Contact Compliance</p>	<p>Advance 400[®] Polypropylene 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>
<p>Customer Notice</p>	<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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