

# PolyPropylene

## Technical Data Sheet

### ADVANCE 150 PLUS

#### Natural Polypropylene Random Copolymer

Advance 150® PLUS Polypropylene Resin is a clarified random copolymer designed for the injection or extrusion blow moulding of high gloss bottles and film & sheet extrusion. Containers produced from Advance 150 PLUS® exhibit optimum surface finish and excellent contact clarity.

#### Typical Applications

- Personal care containers
- High clarity bottles
- Thermoforming
- Film for retort applications

PROPERTIES <sup>(1)</sup>	VALUE	UNIT	TEST METHOD
<b>Physical</b>			
Melt Flow Rate, 230 °C/ 2.16 kg	2.8	g/10min	ISO 1133
Density	0.900	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical <sup>(2)</sup></b>			
Tensile Strength at Yield	29	MPa	ISO 527
Elongation at Yield	11	%	ISO 527
Flexural Modulus	900	MPa	ISO 178
<b>Thermal <sup>(2)</sup></b>			
Heat Deflection Temperature - HDT A (1.8 MPa)	49	°C	ISO 75/A
Heat Deflection Temperature - HDT B (0.45 MPa)	70	°C	ISO 75/B
Vicat Softening Point A (10 N)	133	°C	ISO 306/A
Vicat Softening Point B (50 N)	73	°C	ISO 306/B
<b>Impact <sup>(2)</sup></b>			
Charpy Notched Impact Strength (23 °C)	11	kJ/m <sup>2</sup>	ISO 179
Charpy Notched Impact Strength (0 °C)	3	kJ/m <sup>2</sup>	ISO 179
<b>Optical <sup>(2)</sup></b>			
Clarity	84	%	ASTM D1003

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

(2) Injection Moulded specimens.

Typical processing conditions	Extrusion	Blow Moulding
Zone 1 (°C)	190	180 - 200
Zone 2 (°C)	230	210 - 230
Zone 3 (°C)	250	230 - 250
Zone 4 (°C)	250	220 - 240
Die (°C)	245	220

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<b>Product Stewardship</b>	<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>
<b>Food Contact Compliance</b>	<p>Advance 150® PLUS developmental 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>
<b>Customer Notice</b>	<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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