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Safripol (Pty) Ltd

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[1] | VALUE | UNIT | TEST METHOD |
|---|---|---|---|
| **Physical** | | | |
| Melt Flow Rate, 230 °C/ 2.16 kg | 2.8 | g/10min | ISO 1133 |
| Density | 0.900 | g/cm 3 | ISO 1183 |
| **Mechanical** [2] | | | |
| Tensile Strength at Yield | 29 | MPa | ISO 527 |
| Elongation at Yield | 11 | % | ISO 527 |
| Flexural Modulus | 900 | MPa | ISO 178 |
| **Thermal** [2] | | | |
| 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 |
| **Impact** [2] | | | |
| Charpy Notched Impact Strength (23 °C) | 11 | $kJ/m^2$ | ISO 179 |
| Charpy Notched Impact Strength (0 °C) | 3 | $kJ/m^2$ | ISO 179 |
| **Optical** [2] | | | |
| 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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| | |
|---|---|
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| **Food Contact Compliance** | 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. |
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## Additional Information

Our contact details:

Safripol (Pty) Ltd
Private Bag X 52 Bryanston
2021
South Africa

Website: www.safripol.com

**Gauteng:**
Tel: +27 (0) 11 575 4549

**Kwa-Zulu Natal:**
Tel: +27 (0) 31 450 4111

Email: info@safripol.com

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