SAFRIPOL
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Safripol (Pty) Ltd

Technical Data Sheet

# ASPIRE Bio-100®

## Polyethylene Terephthalate (PET) Copolymer Resin

ASPIRE Bio-100® is a fast reheat, high viscosity PET copolymer resin which offers excellent process ability and is primarily suitable for carbonated and non-carbonated soft drink bottle applications.

This product is a 30% plant based resin utilising renewable resources, made with a reduced carbon footprint supporting sustainability.

### Properties

- Excellent process ability
- Good heat absorption capabilities because of the Fast Reheat Additive
- Good mechanical properties
- Good dimensional stability
- Superb clarity and gloss
- Low Acetaldehyde

### Typical Applications

- Carbonated and non-carbonated soft drink bottles
- Water bottles

| PROPERTIES(1) | VALUE | UNIT | TEST METHOD |
|---|---|---|---|
| **General** | | | |
| Intrinsic Viscosity | 0.84 | dl/g | ASTM D4603 (2) |
| Acetaldehyde | ≤ 1.0 | ppm | ASTM F2013 (3) |
| Moisture | ≤ 2000 | ppm | Internal Test Method |
| **Thermal** | | | |
| Melting point | 254 | °C | ASTM D3418 |
| Crystallinity | ≥ 40 | % | ASTM D3418 |
| **Optical** | | | |
| L * Colour | > 75 | - | ASTM D6290 |
| b * Colour | < 0.5 | - | ASTM D6290 |

1) Typical values; not to be construed as specification limits
2) Dichloroacetic acid 1% solution
3) Helium gas carrier

| TYPICAL PROCESSING CONDITIONS | INJECTION STRETCH BLOW MOULDING |
|---|---|
| Drying Temperature (°C) | 160 – 180 |
| Drying Time (hrs) * | 4 – 6 |
| Processing Temperature (°C) | 280 ± 10 |

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| **Product Stewardship** | 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.<br><br>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. |
| **Food Contact Compliance** | ASPIRE Bio100™ Polyethylene Terephthalate Copolymer Resin should comply with Commission Regulation (EU) No 10/2011 and with U.S. FDA 21 CFR 177.1630 f(1) and g(1) 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

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Published: July 2021