Product data sheet

ESV255

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Sasol Polymers Polypropylene Business

MFR 35 g/10min

Sasol Polymers PP ESV255

is a high flow narrow molecular weight distribution clarified polypropylene random copolymer. The grade is formulated with a mould release additive package.

Injection moulding

Sasol Polymers PP ESV255 is particularly suitable for injection moulding of articles where good transparency (high clarity) and excellent surface gloss is required.

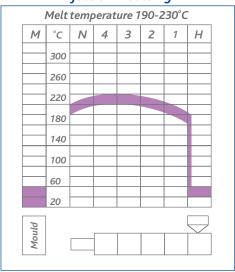
Typical applications are:

- Food containers
- Cosmetic containers
- General housewares
- Caps and closures
- Aerosol dust cover
- Stationery items

Sasol Polymers PP ESV255 contains a nucleating agent that ensures rapid crystallisation, resulting in improved cycle times due to shorter cooling times.

Typical processing temperatures

Injection moulding



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Sasol Polymers PP ESV255

Typical values, not to be construed as specifications.

| | Value | Unit | Test method |
|--|---------|---------|-----------------|
| Rheological properties | | | |
| Melt mass-flow rate - MFR (230/2.16) | 35 | g/10min | ISO 1133 |
| Moulding shrinkage - S_{Mp}/S_{Mn} | 1.2/1.2 | % | ISO 294-4 |
| Mechanical properties | | | |
| Tensile modulus of elasticity | 1100 | MPa | ISO 527-2/1A/1 |
| Tensile stress at yield | 28 | MPa | ISO 527-2/1A/50 |
| Tensile strain at yield | 11 | % | ISO 527-2/1A/50 |
| Tensile strain at break | >50 | % | ISO 527-2/1A/50 |
| Charpy notched impact strength (23°C) | 5.0 | kj/m² | ISO 179-1/1eA |
| Charpy notched impact strength (0°C) | 2.0 | kj/m² | ISO 179-1/1eA |
| Ball indentation hardness - HB | 50 | N/mm² | ISO 2039-1 |
| Thermal properties | | | |
| Melting temperature - DSC | 148 | °C | ISO 11357-3 |
| Heat deflection temperature - HDT/A (1.8 MPa) | 50 | °C | ISO 75-2 |
| Heat deflection temperature - HDT/B (0.45 MPa) | 76 | °C | ISO 75-2 |
| Vicat softening temperature - VST/A 120 (10N) | 132 | °C | ISO 306 |
| Vicat softening temperature - VST/B 120 (50N) | 70 | °C | ISO 306 |
| Other properties | | | |
| Density | 0.905 | g/cm³ | ISO 1183-1 |
| Haze (1.0/2.0mm injection moulded plaques) | 7.5/20 | % | ISO 14782 |