

Technical Data Sheet

Lucalen A2540D



Low Density Polyethylene

Product Description

Lucalen A 2540 D is a low density polyethylene, containing n-butyl acrylate as comonomer. It is used in greenhouse film and stretch hood film. It is delivered in pellet form.

This product is not intended for use in medical and pharmaceutical applications.

Regulatory Status

For regulatory compliance information, see *Lucalen A2540D* [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

| | |
|--------------------------|--|
| Status | Commercial: Active |
| Availability | Africa-Middle East; Asia-Pacific; Europe |
| Application | Agriculture Film; Food Packaging Film; Heavy Duty Packaging; Shrink Film; Stretch Hood |
| Market | Flexible Packaging |
| Processing Method | Blown Film |
| Attribute | Copolymer; Good Processability; Good Toughness; High Elasticity; Low Temperature Flexibility |

| Typical Properties | Nominal Value | Units | Test Method |
|---------------------------------------|---------------|-------------------|---------------|
| Physical | | | |
| Melt Flow Rate, (190 °C/2.16 kg) | 0.25 | g/10 min | ISO 1133-1 |
| Density | 0.923 | g/cm ³ | ISO 1183-1 |
| Mechanical | | | |
| Tensile Modulus | 120 | MPa | ISO 527-1, -2 |
| Tensile Stress at Yield | 7.0 | MPa | ISO 527-1, -2 |
| Film | | | |
| Dart Drop Impact Strength, F50 | 600 | g | ASTM D1709 |
| Tensile Strength | | | |
| MD | 26 | MPa | ISO 527-1, -3 |
| TD | 22 | MPa | ISO 527-1, -3 |
| Tensile Strain at Break | | | |
| MD | 350 | % | ISO 527-1, -3 |
| TD | 550 | % | ISO 527-1, -3 |
| Coefficient of Friction | 0.8 | | ISO 8295 |
| Impact | | | |
| Failure Energy | 19 | J/mm | DIN 53373 |
| Thermal | | | |
| Vicat Softening Temperature, (A/50 N) | 85 | °C | ISO 306 |
| Peak Melting Point | 103 | °C | ISO 11357-3 |
| Optical | | | |
| Haze, (50 µm) | <13 | % | ASTM D1003 |

| | | |
|---|------------|------------|
| Gloss | | |
| (20°) | >20 | ASTM D2457 |
| (60°) | >70 | ASTM D2457 |
| Additional Information | | |
| Comonomer BA | 6.5 % | DIN 51451 |
| Test Specimen | Film | |
| Film properties tested using 50 µm thickness blown film extruded at a melt temperature of 200°C and a blow-up ratio of 2:1. | | |
| Processing Parameters | | |
| Extrusion Temperature | 160-200 °C | |

Notes

These are typical property values not to be construed as specification limits.