

Technical Data Sheet

Lucalen A2700M



Low Density Polyethylene

Product Description

Lucalen A2700M is a low density polyethylene, containing butyl acrylate comonomer. It exhibits low stiffness, low hardness and good impact properties at low temperature.

Lucalen A2700M is suitable for industrial applications where a combination of good processability and excellent softness is required. It is compatible with other *Lucalen* grades and is miscible with other ethylene copolymers, PE-LD, PE-HD and PE-LLD. The grade is available in natural pellet form.

This grade is not intended for medical and pharmaceutical applications.

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|--------------------------|---|
| Application | Geomembranes; Polymer Modifier; Single Ply Roofing; Soft Profile & Sheets; Specialty Film; TPO Foils and Skins; Wire & Cable |
| Market | Compounding; Industrial, Building & Construction |
| Processing Method | Blown Film; Cast Film; Compounding; Compression Molding; Extrusion Flat-die; Injection Molding |
| Attribute | Durable; Good Adhesion; Good Chemical Resistance; Good Colorability; Good Flexibility; Good Optical Properties; Good Processability; High ESCR (Environmental Stress Cracking Resistance); High Impact Resistance; Low Hardness; Low Temperature Flexibility; Low Temperature Impact Resistance; Weldable |

| Typical Properties | Nominal Value | Units | Test Method |
|--|---------------|-------------------|---------------|
| Physical | | | |
| Melt Flow Rate, (190 °C/2.16 kg) | 7.2 | g/10 min | ISO 1133-1 |
| Density, (23 °C, Method A) | 0.924 | g/cm ³ | ISO 1183-1 |
| Mechanical | | | |
| Flexural Modulus | 42 | MPa | ISO 178 |
| Tensile Stress at Break | 11 | MPa | ISO 527-1, -2 |
| Tensile Strain at Break | > 800 | % | ISO 527-1, -2 |
| Environmental Stress Crack Resistance | > 1600 | hr | ASTM D1693 |
| Impact | | | |
| Notched Izod Impact Strength, (-40 °C) | NB | kJ/m ² | ISO 180 |
| Hardness | | | |
| Shore Hardness, (Shore D) | 30 | | ISO 868 |
| Thermal | | | |
| Vicat Softening Temperature, (A/50) | 60 | °C | ISO 306 |
| Peak Melting Point | 95 | °C | ISO 11357-3 |
| Additional Information | | | |
| Comonomer BA | 17 | % | DIN 51451 |