

Technical Data Sheet

Lupolen 3621 M RM

Linear Low Density Polyethylene

Product Description

Lupolen 3621 M RM is a new generation hexene linear low density polyethylene for rotational molding. Typical customer applications include agricultural and chemical storage containers and technical parts. This product exhibits excellent ESCR and high impact strength at low temperatures. Lupolen 3621 M RM is a UV-stabilized and pelletized polymer. Tests have shown that this material is resisting against the harmful effect of biodiesel fuel*. It is not intended for use in medical and pharmaceutical applications.

* Resistance is based on our latest patented technology

This grade is supported for use in drinking water applications.

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|--------------------------|---|
| Application | Crates; Heavy Duty Packaging; Industrial; Industrial Packaging; Intermediate Bulk Containers; Tanks, Industrial |
| Market | Consumer Products; Industrial Packaging; Industrial, Building & Construction |
| Processing Method | Rotomolding |
| Attribute | Good Processability; High ESCR (Environmental Stress Cracking Resistance); Low Temperature Impact Resistance; Low Warpage |

| Typical Properties | Nominal Value | Units | Test Method |
|---|---------------|-------------------|---------------|
| Physical | | | |
| Melt Flow Rate, (190 °C/2.16 kg) | 7.5 | g/10 min | ISO 1133-1 |
| Density | 0.9355 | g/cm ³ | ISO 1183-1 |
| Mechanical | | | |
| Tensile Modulus | 700 | MPa | ISO 527-1, -2 |
| Tensile Stress at Yield | 17 | MPa | ISO 527-1, -2 |
| Tensile Strain at Break | > 450 | % | ISO 527-1, -2 |
| Tensile Strain at Yield | 10 | % | ISO 527-1, -2 |
| Environmental Stress Crack Resistance, F ₅₀ Note: Cond. B, 10% Arkopal N100 | > 1000 | hr | ASTM D1693 |
| FNCT, (6.0 MPa, 2% Arkopal N100, 50 °C) | 15 | hr | ISO 16770 |
| Impact | | | |
| Tensile Impact Strength Note: notched, type 1, method A, -30 °C | 104 | kJ/m ² | ISO 8256 |
| Thermal | | | |
| Vicat Softening Temperature, (A/50) | 113 | °C | ISO 306 |
| Processing Parameters | | | |
| Peak Internal Air Temperature (PIAT) Recommended range. Note: PIAT should not exceed 225 °C. | 180-210 | °C | |