

Technical Data Sheet

Polyaxis LLP3550-2A919G GREY 179



Linear Low Density Polyethylene

Product Description

Polyaxis LLP 3550 is a linear low density polyethylene intended for the rotational molding industry. Offers excellent ESCR and toughness.

| | |
|--------------------------|--|
| Processing Method | Rotomolding |
| Attribute | Good ESCR (Environmental Stress Cracking Resistance); Good Toughness; Hexene Comonomer; UV Resistant |
| Forms | Powder |
| Appearance | Colors Available |
| Application | Agricultural Tanks; Outdoor Applications; Pallets; Septic Tanks; Toys |

| Typical Properties | Nominal Value | Units | Test Method |
|---|---------------|-------------------|-------------|
| Physical | | | |
| Melt Flow Rate, (190 °C/2.16 kg) | 5.0 | g/10 min | ASTM D1238 |
| Density - Specific Gravity | 0.935 | g/cm ³ | ASTM D1505 |
| Mechanical | | | |
| Tensile Elongation at Yield, (51 mm/min) | 20 | % | ASTM D638 |
| Tensile Strength at Yield, (50 mm/min, Rotational Molded) | 16.5 | MPa | ASTM D638 |
| Environmental Stress Crack Resistance | | | |
| (Compression Molded, F50, 100% Igepal) | >980 | hr | ASTM D1693 |
| (Compression Molded, F50, 10% Igepal) | 60.0 | hr | ASTM D1693 |
| Flexural Modulus, (Rotational Molded, 1% Secant) | 621 | MPa | ASTM D790 |
| Impact | | | |
| Impact Strength | | | |
| (-40 °C, 3.18 mm, Rotational Molded) | 81 | J | ARM |
| (-40 °C, 6.35 mm, Rotational Molded) | 217 | J | ARM |
| Thermal | | | |
| Deflection Temperature Under Load Unannealed (264 psi) | 36.1 | °C | ASTM D648 |
| Deflection Temperature Under Load Unannealed (66 psi) | 50 | °C | ASTM D648 |
| Peak Melting Temperature | 126 | °C | ASTM D3418 |