

Technical Data Sheet

Polyaxis LP 8100-5972G ORANGE



Polyethylene, High Density, Metallocene

Product Description

Polyaxis LP-8100 is a high density polyethylene intended for the rotational molding industry. This stiff yet tough compound was designed for watercraft products.

| | |
|-------------------|------------------|
| Processing Method | Rotomolding |
| Forms | Pellets; Powder |
| Appearance | Colors Available |
| Additive | UV Stabilizer |

| Typical Properties | Nominal Value | Units | Test Method |
|--|---------------|-------------------|-------------|
| Physical | | | |
| Melt Flow Rate, (190 °C/2.16 kg) | 5.8 | g/10 min | ASTM D1238 |
| Density - Specific Gravity | 0.947 | g/cm ³ | ASTM D792 |
| Mechanical | | | |
| Tensile Strength at Yield, (51 mm/min, Rotational Molded) | 22.4 | MPa | ASTM D638 |
| Environmental Stress Crack Resistance, (Compression Molded, F50, 10% Igepal) | 6.00 | hr | ASTM D1693 |
| Flexural Modulus, (Rotational Molded, 1% Secant) | 993 | MPa | ASTM D790 |
| Tensile Elongation at Break, (51 mm/min, Rotational Molded) | 200 | % | ASTM D638 |
| Impact | | | |
| Impact Strength | | | |
| (-40 °C, 3.18 mm, Rotational Molded) | 81 | J | ARM |
| (-40 °C, 6.35 mm, Rotational Molded) | >258 | J | ARM |
| Thermal | | | |
| Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm, Rotational Molded) | 40.6 | °C | ASTM D648 |
| Deflection Temperature Under Load Unannealed (66 psi), (3.18 mm, Rotational Molded) | 70.0 | °C | ASTM D648 |