Technical Data Sheet

# *Polyaxis* LP 8000-1684G WHITEWHI

Polyethylene, High Density, Metallocene

## Product Description

*Polyaxis* LP-8000 is a high density polyethylene intended for the rotational molding industry. This stiff yet tough compound has been used in watercraft with good success.

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|---|---|
| **Processing Method** | Rotomolding |
| **Forms** | Pellets; Powder |
| **Appearance** | Colors Available |
| **Additive** | Long Term UV-10 Stabilizer |

| Typical Properties | Nominal Value | Units | Test Method |
|---|---|---|---|
| **Physical** | | | |
| Melt Flow Rate, (190 °C/2.16 kg) | 3.6 | g/10 min | ASTM D1238 |
| Density - Specific Gravity | 0.945 | g/cm³ | ASTM D792 |
| **Mechanical** | | | |
| Tensile Strength at Yield, (51 mm/min, Rotational Molded) | 22.1 | MPa | ASTM D638 |
| Environmental Stress Crack Resistance, (Compression Molded, F50, 10% Igepal) | 6.00 | hr | ASTM D1693 |
| Flexural Modulus, (Rotational Molded, 1% Secant) | 1000 | MPa | ASTM D790 |
| Tensile Elongation at Break, (51 mm/min, Rotational Molded) | 500 | % | ASTM D638 |
| **Impact** | | | |
| Impact Strength | | | |
| (-40 °C, 3.18 mm, Rotational Molded) | 88 | 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) | 39.3 | °C | ASTM D648 |
| Deflection Temperature Under Load Unannealed (66 psi), (3.18 mm, Rotational Molded) | 71.1 | °C | ASTM D648 |