HK:+852-69575415 China GuangDong:+13538586433 ShangHai:+18816996168

# Polyaxis EXPLP 8000-31G BLACK

## LyondellBasell Industries - Metallocene High Density Polyethylene

### General Information

**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.

**General**

| | | |
|---|---|---|
| Additive | • Long Term UV-10 Stabilizer | |
| Features | • UV Stabilized | |
| Appearance | • Colors Available | |
| Forms | • Pellets | • Powder |
| Processing Method | • Rotational Molding | |

### Properties [1]

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density / Specific Gravity | 0.947 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 3.6 | g/10 min | ASTM D1238 |
| Environmental Stress-Cracking Resistance (ESCR) | | | ASTM D1693 |
| 10% Igepal, Compression Molded, F50 | 6.00 | hr | |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Strength [2] (Yield, Rotational Molded) | 3210 | psi | ASTM D638 |
| Tensile Elongation [2] (Break, Rotational Molded) | 500 | % | ASTM D638 |
| Flexural Modulus - 1% Secant (Rotational Molded) | 145000 | psi | ASTM D790 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Impact Strength | | | ARM |
| -40°F, 0.125 in, Rotational Molded | 65 | ft·lb | |
| -40°F, 0.250 in, Rotational Molded | > 190 | ft·lb | |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 psi, Unannealed, 0.125 in, Rotational Molded | 160 | °F | |
| Deflection Temperature Under Load | | | ASTM D648 |
| 264 psi, Unannealed, 0.125 in, Rotational Molded | 103 | °F | |

### Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 2.0 in/min