**Technical Data Sheet**

# *Polyaxis* CP 812

Linear Low Density Polyethylene
LyondellBasell Industries
Rotomolding

| Product Description |
|---|
| Polyaxis CP 812 is a general purpose linear low density polyethylene compund offering quick cycles and part to part consistancy. Available as pellet or powder. |

| General | | |
|---|---|---|
| Additive | • Long Term UV-8 Stabilizer: Yes | |
| Features | • Fast Molding Cycle | |
| Uses | • General Purpose | |
| UL File NumberUsa | • E 51193 | |
| Appearance | • Colors Available | |
| Forms | • Pellets | • Powder |
| Processing Method | • Rotational Molding | |

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|---|---|---|
| Density [1] | 0.932 to 0.939 g/cm³ | 0.932 to 0.939 g/cm³ | ASTM D1505 |
| Melt Mass-Flow Rate (MFR) (190°c/2.16 Kg) | 5.0 to 7.0 g/10 min | 5.0 to 7.0 g/10 min | ASTM D1238 |
| Environmental Stress-Cracking Resistance (ESCR) | | | ASTM D1693 |
| 10% Igepal, Compression Molded, F50 | > 25.0 hr | > 25.0 hr | |
| 100% Igepal, Compression Molded, F50 | > 500 hr | > 500 hr | |
| **Mechanical** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Tensile Strength [2] (Yield, Rotational Molded) | 2250 psi | 15.5 MPa | ASTM D638 |
| Tensile Elongation [2] | | | ASTM D638 |
| Break, Rotational Molded | 500 % | 500 % | |
| Flexural Modulus - 1% Secant (Rotational Molded) | 85000 psi | 586 MPa | ASTM D790 |
| **Impact** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Impact Strength | | | ARM |
| -40°f (-40°c), 0.125 In (3.18 Mm), Rotational Molded | 56 ft·lb | 76 J | |
| -40°f (-40°c), 0.250 In (6.35 Mm), Rotational Molded | 145 ft·lb | 197 J | |
| **Thermal** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 Psi (0.45 Mpa), Unannealed, 0.00492 In (0.125 Mm), Rotational Molded | 129 °F | 54.0 °C | |
| 264 Psi (1.8 Mpa), Unannealed, 0.00492 In (0.125 Mm), Rotational Molded | 96.8 °F | 36.0 °C | |
| **Flammability** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Flame Rating (0.06 In (1.5 Mm), All) | HB | HB | UL 94 |

### Notes

[1] Compression Molded

[2] 2.0 in/min (51 mm/min)

### Notes

These are typical property values not to be construed as specification limits.