



DOW™ HDPE 06448N

High Density Polyethylene Resin

Overview

- Injection molding
- Roll-out trash carts and other large parts
- Excellent impact strength, stress crack resistance and processability
- Very narrow molecular weight distribution

Complies with:

- U.S. FDA 21 CFR 177.1520 (c) 3.1a
- Canadian HPFB No Objection

Consult the regulations for complete details.

06448N High Density Polyethylene Resin is intended for use in injection molding applications such as roll-out trash carts and other large parts with short molding cycles. It has been designed to meet the rigorous performance characteristics of impact resistance, environmental stress crack resistance, stiffness, and low warpage, while maintaining excellent moldability.

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|----------------------------|-------------------------|-------------|
| Density | 0.948 g/cm ³ | 0.948 g/cm ³ | ASTM D792 |
| Melt Index (190°C/2.16 kg) | 6.5 g/10 min | 6.5 g/10 min | ASTM D1238 |
| Environmental Stress-Cracking Resistance (ESCR) | | | ASTM D1693 |
| 122°F (50°C), 100% Igepal, F50 | 40.0 hr | 40.0 hr | |
| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Strength | | | ASTM D638 |
| Yield, Compression Molded | 3600 psi | 24.8 MPa | |
| Break, Compression Molded | 3800 psi | 26.2 MPa | |
| Tensile Elongation | | | ASTM D638 |
| Yield, Compression Molded | 8.0 % | 8.0 % | |
| Break, Compression Molded | 1200 % | 1200 % | |
| Flexural Modulus - 2% Secant (Compression Molded) | 146000 psi | 1010 MPa | ASTM D790B |
| Impact | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Impact Strength ¹ (Compression Molded) | 50.0 ft·lb/in ² | 105 kJ/m ² | ASTM D1822 |
| Hardness | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Durometer Hardness (Shore D) | 54 | 54 | ASTM D2240 |
| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 psi (0.45 MPa), Unannealed, Compression Molded | 154 °F | 67.8 °C | |
| Brittleness Temperature | < -105 °F | < -76.1 °C | ASTM D746 |
| Vicat Softening Temperature | 261 °F | 127 °C | ASTM D1525 |
| Melting Temperature (DSC) | 266 °F | 130 °C | Dow Method |
| Peak Crystallization Temperature (DSC) | 244 °F | 118 °C | Dow Method |

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ Type S

