



DOWLEX™ NG 2429.01G

Polyethylene Resin

Overview

- Intermediate bulk containers
- Drums for chemicals
- Boats, freezer containers, fish crates and tanks
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.1a
- Consult the regulations for complete details.

DOWLEX™ NG 2429.01G Polyethylene Resin is an ethylene octene copolymer for rotational moulding and is specifically designed for applications requiring excellent environmental stress crack resistance and impact strength combined with low warpage and good processing. DOWLEX NG 2429.01G is fully heat and UV stabilized resulting in a wide processing latitude, good colour retention, and long life expectancy.

Additive

- Antiblock: No
- Slip: No
- Processing Aid: No

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|-------------------------|-------------------------|--------------|
| Density | 0.935 g/cm ³ | 0.935 g/cm ³ | ISO 1183 |
| Melt Index (190°C/2.16 kg) | 4.0 g/10 min | 4.0 g/10 min | ISO 1133 |
| Environmental Stress-Cracking Resistance | | | ASTM D1693 |
| 122°F (50°C), 10% Antarox, Rotational Molded ¹ | 400 hr | 400 hr | |
| 122°F (50°C), 100% Antarox, Compression Molded | > 1000 hr | > 1000 hr | |
| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Stress | | | ISO 527-2 |
| Yield, Compression Molded | 2470 psi | 17.0 MPa | |
| Yield, Rotational Molded ¹ | 2470 psi | 17.0 MPa | |
| Break, Compression Molded | 3580 psi | 24.7 MPa | |
| Break, Rotational Molded ¹ | 3160 psi | 21.8 MPa | |
| Tensile Strain | | | ISO 527-2 |
| Break, Compression Molded | 800 % | 800 % | |
| Break, Rotational Molded ¹ | 700 % | 700 % | |
| Flexural Modulus - 1% Secant (Compression Molded) | 92800 psi | 640 MPa | ISO 178 |
| Tear Resistance | | | DIN 53515 |
| ... ² | 20305 psi | 140 MPa | |
| Compression Molded | 21030 psi | 145 MPa | |
| Impact | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Multi-Axial Instrumented Impact Energy | | | ISO 6603-2 |
| -4°F (-20°C), 0.0394 in (1.00 mm), Compression Molded | 17.0 ft-lb | 23.0 J | |
| 73°F (23°C), Rotational Molded ¹ | 12.5 ft-lb | 17.0 J | |
| 73°F (23°C), 0.0394 in (1.00 mm), Compression Molded | 12.5 ft-lb | 17.0 J | |
| Hardness | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Shore Hardness (Shore D, Compression Molded) | 57 | 57 | ISO 868 |
| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Heat Deflection Temperature | | | ISO 75-2/A |
| 264 psi (1.8 MPa), Unannealed | 102 °F | 38.9 °C | |
| Vicat Softening Temperature | 244 °F | 118 °C | ISO 306/A120 |
| Melting Temperature | 257 °F | 125 °C | DSC |
| Peak Crystallization Temperature (DSC) | 221 °F | 105 °C | DSC |

