



DOWLEX™ NG 2429.01G Polyethylene Resin

Overview

- Intermediate bulk containers
- Drums for chemicals
- Boats, freezer containers, fish crates, small 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.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.935 g/cm ³	0.935 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	4.0 g/10 min	4.0 g/10 min	ISO 1133
Environmental Stress-Cracking Resistance			
122°F (50°C), 10% AntaroX, Rotational Molded	400 hr	400 hr	ASTM D1693 ¹
122°F (50°C), 100% AntaroX, Compression Molded	> 1000 hr	> 1000 hr	ASTM D1693
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			
Yield, Compression Molded	2470 psi	17.0 MPa	ISO 527-2
Yield, Rotational Molded	2470 psi	17.0 MPa	ISO 527-2 ¹
Break, Compression Molded	3580 psi	24.7 MPa	ISO 527-2
Break, Rotational Molded	3160 psi	21.8 MPa	ISO 527-2 ¹
Tensile Strain			
Break, Compression Molded	800 %	800 %	ISO 527-2
Break, Rotational Molded	700 %	700 %	ISO 527-2 ¹
Flexural Modulus - 1% Secant (Compression Molded)	92800 psi	640 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Multi-Axial Instrumented Impact Energy			
-4°F (-20°C), 0.0394 in (1.00 mm), Compression Molded	17.0 ft·lb	23.0 J	ISO 6603-2
73°F (23°C), Rotational Molded	12.5 ft·lb	17.0 J	ISO 6603-2 ¹
73°F (23°C), 0.0394 in (1.00 mm), Compression Molded	12.5 ft·lb	17.0 J	ISO 6603-2
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			
264 psi (1.8 MPa), Unannealed	167 °F	75.0 °C	ISO 75-2/A
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
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
Tear Resistance			
--	21.0 ksi	145 MPa	DIN 53515 ²
--	20.3 ksi	140 MPa	DIN 53515 ³

Notes

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

¹ 3 to 4 mm plate thickness

² Compression Molded

³ Rotational Molded, 3 to 4 mm plate thickness

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