



DOWLEX™ 2629.10UE Polyethylene Resin

Overview

DOWLEX™ 2629UE Polyethylene Resin for rotational and injection moulding is specifically designed for applications requiring excellent environmental stress crack resistance and impact strength combined with low warpage and good processing. Processing and Stabilisation: DOWLEX™ 2629UE Polyethylene Resin is fully heat and UV stabilised resulting in a wide processing latitude, good colour retention and long life expectancy. The powder version is named DOWLEX™ 2629.10UE Polyethylene Resin.

Applications:

- Intermediate bulk containers
- Drums for chemicals
- Boats
- Freezer containers
- Fish crates
- Small tanks

Complies with:

- EU, No 10/2011
- U.S. FDA CFR 177.1520(c)3.1a

Consult the regulations for complete details.

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	ASTM D792
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, Compression Molded	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 (Yield, Compression Molded)	2540 psi	17.5 MPa	ISO 527-2
Tensile Strain (Break, Compression Molded)	650 %	650 %	ISO 527-2
Flexural Modulus (Compression Molded)	93500 psi	645 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Multi-Axial Instrumented Impact Energy ¹			ISO 6603-2
-4°F (-20°C), Rotational Molded	48.7 to 64.9 ft·lb	66.0 to 88.0 J	
73°F (23°C), Rotational Molded	39.8 to 53.1 ft·lb	54.0 to 72.0 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/B
66 psi (0.45 MPa), Unannealed	149 °F	65.0 °C	
Vicat Softening Temperature	246 °F	119 °C	ASTM D1525 ²
Melting Temperature	255 °F	124 °C	DSC
Peak Crystallization Temperature (DSC)	230 °F	110 °C	DSC

Notes

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

¹ Plates of 3-4 mm thickness.

² Rate B (120°C/h), Loading 1 (10 N)

