



# DOWLEX™ 2631UE

## Polyethylene Resin

### Overview

DOWLEX™ 2631UE Polyethylene Resin for rotational and injection moulding is specifically designed for applications requiring excellent processability and aesthetics combined with low warpage and good mechanical properties. Processing and Stabilisation: DOWLEX™ 2631UE 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™ 2631.10UE Polyethylene Resin.

Applications:

- Toys
- Technical mouldings
- Flat surface containers
- Caravan tanks

Complies with:

- EU, No 10/2011
- U.S. FDA 21 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 <sup>3</sup>	0.935 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	7.0 g/10 min	7.0 g/10 min	ISO 1133
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
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)	2580 psi	17.8 MPa	ISO 527-2
Tensile Strain (Break, Compression Molded)	420 %	420 %	ISO 527-2
Flexural Modulus (Compression Molded)	91100 psi	628 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Multi-Axial Instrumented Impact Energy <sup>1</sup>			ISO 6603-2
-4°F (-20°C), Rotational Molded	44.0 to 58.7 ft·lb	59.7 to 79.6 J	
73°F (23°C), Rotational Molded	39.2 to 52.2 ft·lb	53.1 to 70.8 J	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Shore Hardness (Shore D, Compression Molded)	56	56	ISO 868
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	136 °F	57.8 °C	
Vicat Softening Temperature	239 °F	115 °C	ASTM D1525 <sup>2</sup>
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.

<sup>1</sup> Plates of 3-4 mm thickness.

<sup>2</sup> Rate B (120°C/h), Loading 1 (10 N)

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