DOWLEX™ 2631.10UE
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/cm³	0.935	g/cm³	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					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 [1]					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 [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)