

## Technical Information

# DOW™ HDPE KT 10000 UE High Density Polyethylene Resin



### Overview

HDPE KT 10000 UE Polyethylene Resin is an UV stabilised resin with very narrow molecular weight distribution. It was developed to impart excellent stiffness, combined with good impact strength to injection moulded parts, at minimum warpage.

Note: HDPE KT 10000 UE Polyethylene Resin should comply with FDA regulation 177.1520 and with most European food contact regulations when used unmodified and processed according to good manufacturing practices for food contact applications. Please, contact your nearest Dow office for food contact compliance statements. The purchaser remains responsible for determining whether the use complies with all relevant regulations.

#### Applications:

- Cases and boxes for industrial parts.
- Farm produce and beverage crates.
- Pails and buckets.

### Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.964 g/cm <sup>3</sup>	0.964 g/cm <sup>3</sup>	ASTM D792
Melt Index			ISO 1133
190°C/2.16 kg	8.0 g/10 min	8.0 g/10 min	
190°C/5.0 kg	22 g/10 min	22 g/10 min	
Spiral Flow	28.9 in	73.5 cm	Dow Method
Molding Shrinkage - Flow	0.021 in/in	2.1 %	ASTM D955
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
100% AntaroX CO-630, Compression Molded	2.50 hr	2.50 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield, Compression Molded	4210 psi	29.0 MPa	
Break, Compression Molded	4640 psi	32.0 MPa	
Tensile Elongation			ASTM D638
Break, Compression Molded	800 %	800 %	
Flexural Modulus - 2% Secant (Compression Molded)	152000 psi	1050 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength (Compression Molded)	36.6 ft·lb/in <sup>2</sup>	77.0 kJ/m <sup>2</sup>	ASTM D1822
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Shore Hardness (Shore D, Compression Molded)	66	66	ISO 868
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	268 °F	131 °C	ISO 306/A

### 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> Melt Temperature: 482°F (250°C)

<sup>2</sup> 2 seconds injection

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