

DOW™ HDPE KT 10000 UE

High Density Polyethylene Resin
The Dow Chemical Company

Technical Data

Product Description

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.

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• The Dow Chemical Company
Availability	• Europe
Forms	• Pellets

Physical	Nominal Value Unit	Test Method
Specific Gravity	0.964 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR)		ISO 1133
190°C/2.16 kg	8.0 g/10 min	
190°C/5.0 kg	22 g/10 min	
Spiral Flow ^{3, 4}	73.5 cm	Internal Method
Molding Shrinkage - Flow	2.1 %	ASTM D955
Environmental Stress-Cracking Resistance		ASTM D1693
100% AntaroX CO-630, Compression Molded	2.50 hr	

Mechanical	Nominal Value Unit	Test Method
Tensile Strength		ASTM D638
Yield, Compression Molded	29.0 MPa	
Break, Compression Molded	32.0 MPa	
Tensile Elongation		ASTM D638
Break, Compression Molded	800 %	
Flexural Modulus - 2% Secant (Compression Molded)	1050 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Tensile Impact Strength (Compression Molded)	77.0 kJ/m ²	ASTM D1822

Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore D, Compression Molded)	66	ISO 868

Thermal	Nominal Value Unit	Test Method
Vicat Softening Temperature	131 °C	ISO 306/A

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ Melt Temperature: 250°C

⁴ 2 seconds injection