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/cm³	0.964	g/cm³	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 [1, 2]	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/in²	77.0	kJ/m²	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.

[1] Melt Temperature: 482°F (250°C)

[2] 2 seconds injection

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