

DOW™ HDPE KS 10100 UE

The Dow Chemical Company - High Density Polyethylene Resin

Tuesday, March 10, 2020

General Information

Product Description

HDPE KS 10100 UE Polyethylene Resin is a high density polyethylene resin designed to exhibit improved processability, excellent impact strength, stress crack resistance and UV stability for outdoor use, at minimum warpage.

Note: HDPE KS 10100 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:

- Waste bins.
- · Large containers.
- · Tough parts.

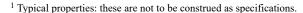
General			
Material Status	Commercial: Active		
Availability	Asia Pacific	• Europe	
Additive	Antiblock: No	• Processing Aid: No	• Slip: No
Agency Ratings	• FDA 21 CFR 175.1520		
Forms	• Pellets		

ASTM & ISO Properties ¹				
Physical	Nominal Value	Unit	Test Method	
Density / Specific Gravity	0.955	g/cm³	ASTM D792	
Melt Mass-Flow Rate (MFR)			ISO 1133	
190°C/2.16 kg	4.0	g/10 min		
190°C/5.0 kg	12	g/10 min		
Spiral Flow ^{2, 3}	63.5	cm	Internal Method	
Molding Shrinkage - Flow ⁴ (250°C)	2.6	%	ASTM D955	
Environmental Stress-Cracking Resistance (ESCR) ⁵			ASTM D1693	
50°C, 100% Antarox, Compression Molded	10.0	hr		
Mechanical	Nominal Value	Unit	Test Method	
Tensile Strength (Yield, Compression Molded)	25.0	MPa	ASTM D638	
Tensile Strength (Break, Compression Molded)	27.0	MPa	ASTM D638	
Tensile Elongation (Break, Compression Molded)	> 1600	%	ASTM D638	
Flexural Modulus - 2% Secant (Compression Molded)	850	MPa	ASTM D790	
Impact	Nominal Value	Unit	Test Method	
Tensile Impact Strength (Compression Molded)	85.0	kJ/m²	ASTM D1822	
Hardness	Nominal Value	Unit	Test Method	
Shore Hardness (Shore D, Compression Molded)	65		ISO 868	
Thermal	Nominal Value	Unit	Test Method	
Vicat Softening Temperature	128	°C	ISO 306/A	

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Notes



² Melt Temperature: 250°C

³ 2 seconds injection

⁴ 0.5 seconds injection

⁵ Notched