

HDPE

HDPE HD 6070 UA

HIGH DENSITY POLYETHYLENE (HDPE)

This is a high-density polyethylene grade with a narrow molecular weight distribution, suitable for a wide range of injection moulding applications. The grade has the following characteristics:

Typical Application	Product Characteristics
• Crates • Boxes • Seats • Pallets	• Easy processing • High rigidity • Good impact strength • High warpage resistance • UV-stabilized for outdoor service

Physical Properties			
Properties	Test Method	Typical Value	Unit
Melt Flow Rate (190°C/2.16kg)	ISO 1133	7.5	g/10 min
Density	ISO 1183-2	0.960	g/cm ³
Tensile Strength at Yield MD/TD (Injection)	ISO 527 1&2	26/27	MPa
Tensile Strength at Yield MD (Compression)	ISO 527 1&2	31	MPa
Elongation at Break MD/TD (Injection)	ISO 527 1&2	1100/1300	%
Elongation at Break MD (Compression)	ISO 527 1&2	>1000	%
Flexural Modulus (Compression)	ISO 178	1400	MPa
Flexural Modulus (Injection)	ISO 178	1100	MPa
ESCR, F50, 23°C (Compression)	ASTM D1693A norm	55	h
ESCR, F50, 23°C (Injection)	ASTM D1693A norm	25	h
Charpy Impact Resistance (Compression)	ISO 179/A&B	6	kJ/m ²
Charpy Impact Resistance (Injection)	ISO 179/A&B	8	kJ/m ²

Processing Guidelines
Injection test plaques were prepared at 250°C, injection pressure 1000 bar, dwell pressure 800 bar, dwell time 15 s. The UA designation denotes UV stabilization for outdoor service; values are reported for both compression-molded and injection-molded test specimens.

The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.