

# Braskem PE HD4600U

High Density Polyethylene

Braskem

Message:

The resin HD4600U is a High Density Polyethylene developed for rotational molding.

Applications:

Large tanks for water storage

Cisterns

Manholes

High stiffness parts

Technical Characteristics:

Excellent balance between stiffness and impact resistance

Creep Resistance

UV radiation and heat stabilization

Additives:

Weathering resistance UV14 and antioxidants.

General Information			
Additive	Long Term UV-14 Stabilizer		
	Antioxidation		
	heat stabilizer		
Features	UV Stabilized		
	Rigidity, high		
	Rigid, good		
	Antioxidation		
	Impact resistance, good		
	Good creep resistance		
	Thermal Stability		
Uses	Water tank		
Processing Method	rotomolding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.942	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance			ASTM D1693
50°C, 2.00mm, 10% Igepal, molded, F50	42.0	hr	ASTM D1693
50°C, 2.00mm, 100% Igepal, molded, F50	> 1000	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	22.0	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	12	%	ASTM D638
Fracture	> 1000	%	ASTM D638

Flexural Modulus	900	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Impact Strength			ARM
-40°C, 3.14mm, rotational molding	85	J	ARM
-40°C, 6.34mm, rotational molding	235	J	ARM
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	67.0	°C	ASTM D648
1.8 MPa, not annealed	46.0	°C	ASTM D648
Peak Melting Temperature	129	°C	ASTM D3418
Oxidation Induction Time	> 100	min	ASTM D3895

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#### Recommended distributors for this material

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