Braskem

Datasheet
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High Density Polyethylene HD4601U

Description:
The resin HD4601U is a High Density Polyethylene developed for rotational molding with excellent processability.

Applications:
Large tanks and cisterns
Manhole
High stiffness parts

Technical Characteristics:
Excellent balance between stiffness and impact resistance
UV radiation and heat stabilization

Additives:
- Weathering resistance UV16 and antioxidants.

Processes:
Rotational Molding

Control Properties:

Feature	Method	Units	Values
Melt Flow Rate (190°C/2.16kg)	ASTM D 1238	g/10 min	2.0
Density	ASTM D 792	g/cm³	0.942

Typical Properties:
Plaque properties

Feature	Method	Units	Values
Elongation at Yield (a)	ASTM D 638	%	11
Elongation at Break (a)	ASTM D 638	%	> 1000
Tensile Strength at Yield (a)	ASTM D 638	MPa	23
Flexural Modulus - 1% Secant (b)	ASTM D 790	MPa	920
Environmental Stress Cracking Resistance - Notch 0,3 mm; 50°C; 10% Igepal CO630 (a)	ASTM D 1693	h/F50	20
Environmental Stress Cracking Resistance - Notch 0,3 mm; 50°C; 100% Igepal CO630 (a)	ASTM D 1693	h/F50	1000
Deflection Temperature under Load at 0,455 MPa (b)	ASTM D 648	°C	64
Deflection Temperature under Load at 1,82 MPa (b)	ASTM D 648	°C	46
Impact Strength - Thickness 3,17 mm (c)	ARM	J	85
Impact Strength - Thickness 6,34 mm (c)	ARM	J	235
OIT	ASTM D 3895	min	> 100
Melting temperature	ASTM D 3418	°C	129

Typical properties correspond to average values obtained in our laboratories. Test specimens prepared from compression molded sheet made according to ASTM D 4702.
Thickness of test piece: a) 2 mm; b) 3 mm; c) Rotomolded plaque. Test temperature -40°C.

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