

High Density Polyethylene HD4600U

Description:

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.

Resin Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	2.0
Density	D 792	g/cm ³	0.942
Melting temperature	D 3418	°C	129

Typical Properties ^a:

	ASTM Methods	Units	Values
Tensile Strength at Yield	D 638	MPa	22
Tensile Elongation at Yield	D 638	%	12
Tensile Elongation at Break	D 638	%	> 1000
Flexural Modulus	D 790	MPa	900
Environmental Stress Cracking Resistance(ESCR) ^b : 10% Igepal 100% Igepal	D 1693	h/F50	42 > 1000
Heat Deflection Temperature: 0,455 MPa 1,82 MPa	D 648	°C	67 46
Impact Strength at -40°C ^c : Thickness 3,17mm Espessura 6,34mm	ARM	J	85 235
OIT	D3895	Min.	>100

(a) Test specimens prepared from compression molded sheet made according to ASTM D 4703.

(b) Compression molded 2 mm thickness, 0.3 mm notched-plaques, 50°C.

(c) Rotomolded plaque

Observações Finais:

1. This resin meets the requirements for olefin polymers as defined in 21 CFR, section 177.1520 issued by FDA – Food and Drug Administration in force on the date of publication of this specification. The additives present are covered in appropriate regulation by FDA
 2. The information presented in this Data Sheet reflects typical values obtained in our laboratories, but should not be considered as absolute or as warranted values. Only the properties and values mentioned on the Certificate of Quality are considered as guarantee of the product.
 3. In some applications, Braskem has developed tailor-made resins to reach specific requirements.
 4. In case of doubt regarding utilization, or for other applications, please contact our Application Engineering area.
 5. For information about safety, handling, individual protection, first aids and waste disposal, please see MSDS. CAS Registry number: 25087-34-7.
 6. The mentioned values in this report can be changed at any moment without Braskem previous communication.
 7. Braskem does not recommend this grade for plastic containers of physiological saline and/or parenterally administered drugs.
 8. The content of this Data Sheet replaces previous revisions published for this product.
 9. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.
- 10.