Braskem

Data Sheet
Review 6 (Apr/12)

Linear Low Density Polyethylene ML3601U

Description:

The resin ML3601U is a Linear Low Density Polyethylene, 1-hexene copolymer, indicated for rotational molding.
It presents excellent environmental stress cracking resistance and high impact strength. This resin is ideally suited for applications that require a higher mechanical performance and coog chemical resistance.

Applications:

Large tanks for water and chemical products storage, underground tanks, septic tanks and manholes.

Processing Conditions:

Conditions comparable to polyethylene resins with similar melt index and density range.
Oven temperature range: 250 to 350 ºC.
P.I.A.T.: 210 a 240º

Additives:

Weathering resistance UV8 and antioxidants.

Resin Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	3.3
Density	D 1505	g/cm^3	0.939
Melting Temperature	D 3418	°C	127

Typical Properties [a]:

	ASTM Methods	Units	Values
Tensile Strength at Yield	D 638	MPa	21
Tensile Elongation at Yield	D 638	%	14
Tensile Strength at Break	D 638	MPa	30.1
Tensile Elongation at Break	D 638	%	> 1000
Flexural Modulus	D 790	MPa	760
Environmental Stress Cracking Resistance(ESCR)[b]: 10% Igepal 100% Igepal	D 1693	h/F50	 145 > 1000
Heat Deflection Temperature: 0,455 MPa 1,82 MPa	D 648	°C	 60 41
Impact Strength at -40°C: 3,17 mm thickness 6,34 mm thickness	ARM	J	 82 228
HDB	D2837	MPa	8,62
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, 50ºC.

Final Remarks:

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 Technical Assistance.
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.