

Braskem UTEC® 3040 Ultra High Molecular Weight Polyethylene

Category : Polymer , Thermoplastic , Polyethylene (PE) , HDPE , High Density Polyethylene (HDPE), UHMW PE Ultra High Molecular Weight

Material Notes:

Description: UTEC3040 is an Ultra High Molecular Weight Polyethylene with a molecular weight about 10 times higher than High Density Polyethylene (HDPE) resins. This extremely high molecular weight yields several unique properties to this polymer such as high abrasion resistance and impact strength and low coefficient of friction, what makes it a self-lubricating material. Applications: Applications which require high impact resistance – technical and porous parts, filters, compression molded sheets. Information provided by Braskem.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Braskem-UTEC-3040-Ultra-High-Molecular-Weight-Polyethylene.php

Physical Properties	Metric	English	Comments
Specific Gravity	0.925 g/cc	0.925 g/cc	ASTM D792/ISO 1183
Bulk Density	0.450 g/cc	0.0163 lb/in ³	ASTM D-1895
Particle Size	205 µm	205 µm	Average; D50; ASTM D1921
Viscosity Measurement	14	14	Intrinsic in dl/g; ASTM D4020
Molecular Weight	3.00e+6 g/mol	3.00e+6 g/mol	Braskem

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	64	64	ASTM D2240/ISO 868
	57	57	ASTM D2240/ISO 868
	@Time 15.0 sec	@Time 0.00417 hour	
Tensile Strength at Break	>= 30.0 MPa	>= 4350 psi	ASTM D638
Tensile Strength, Yield	>= 17.0 MPa	>= 2470 psi	ASTM D638/ISO 527
Elongation at Break	>= 350 %	>= 350 %	ASTM D638
	>= 400 %	>= 400 %	ISO 527
Izod Impact, Notched	NB	NB	ASTM D256
Charpy Impact, Notched	>= 19.0 J/cm ²	>= 90.4 ft-lb/in ²	Determined with double-notched specimens; ISO 11542-2
Coefficient of Friction, Dynamic	0.090	0.090	ASTM D1894
Coefficient of Friction, Static	0.10	0.10	ASTM D-1894
Abrasion	25	25	reference Stainless Steel SAE1020 = 100; Braskem (sand slurry)
	100	100	ISO 15527 reference set as 100);

Mechanical Properties	Metric	English	Braskem (sand slurry) Comments
Descriptive Properties	Value	Comments	
Elongation Stress	0.2 MPa	ISO 11542-2; (150/10)	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China