Alkatuff® 501

Linear Low Density Polyethylene Qenos Pty Ltd

Message:

501 is a hexene copolymer linear low density polyethylene, designed for a variety of film applications. 501 is formulated with a stabilisation package but contains no other additives.

501 is intended for general purpose applications such as liners, garbage, industrial and agricultural films. 501 is not recommended for use in outdoor applications (especially applications where there may be prolonged exposure to sunlight, eg. agricultural films) without the addition of appropriate Hindered Amine based Light Stabilisers (HALS).

501 is suitable for food contact applications and conforms to the requirements of the United States Food and Drug Administration CFR 21 177.1520, paragraph (c), item 3.1.

General Information Features Copolymer Compliance of Food Exposure General Uses Films Lining Industrial application Agricultural application Agricultural application Porticle Processing Method Film extrusion Physical Nominal Value Unit Test Me ASTM D Mechanical Nominal Value Unit Test Me 0.50 Coefficient of Friction (Blown Film) 0.50 ASTM D Films Nominal Value Unit Test Me 0.50 ASTM D ASTM D ASTM D ASTM D ASTM D Coefficient of Friction (Blown Film) Nominal Value Unit Test Me 0.50 ASTM D ASTM D Coefficient of Friction (Blown Film) Nominal Value Unit Test Me 0.50 Coefficient of Friction (Blown Film) Nominal Value Unit Test Me				
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Film Thickness - Tested 50 µm				
secant modulus ASTM D	 882			
2% secant, MD: 25 μm 230 MPa ASTM D				

MPa

ASTM D882

240

2% secant, MD: 50 μm

2% secant, TD: 25 μm	270	MPa	ASTM D882
2% secant, TD: 50 μm	280	MPa	ASTM D882
Tensile Strength			ASTM D882
MD: Yield, 25 μm	11.0	MPa	ASTM D882
MD: Yield, 50 μm	11.0	MPa	ASTM D882
TD: Yield, 25 μm	13.0	MPa	ASTM D882
TD: Yield, 50 μm	13.0	MPa	ASTM D882
MD: Break, 25 μm	43.0	MPa	ASTM D882
MD: Break, 50 μm	43.0	MPa	ASTM D882
TD: Break, 25 µm	34.0	MPa	ASTM D882
TD: Break, 50 µm	41.0	MPa	ASTM D882
Tensile Elongation			ASTM D882
MD: Break, 25 μm	900	%	ASTM D882
MD: Break, 50 μm	1100	%	ASTM D882
TD: Break, 25 µm	950	%	ASTM D882
TD: Break, 50 µm	1200	%	ASTM D882
Dart Drop Impact			ASTM D1709
25 μm, blown film	120	g	ASTM D1709
50 μm, blown film	220	g	ASTM D1709
Elmendorf Tear Strength			ASTM D1922
MD : 25 μm	200	g	ASTM D1922
MD : 50 μm	500	g	ASTM D1922
TD : 25 µm	530	g	ASTM D1922
TD : 50 µm	980	g	ASTM D1922
Optical	Nominal Value	Unit	Test Method
Gloss			ASTM D2457
25.0 μm, blown film	66		ASTM D2457
50.0 μm, blown film	62		ASTM D2457
Haze			ASTM D1003
25.0 μm, blown film	9.0	%	ASTM D1003
50.0 μm, blown film	12	%	ASTM D1003
Additional Information			

Film properties taken from blown film processed at a blow up ratio of 3.5:1.

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Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519 Phone: +86 13424755533 Email: sales@su-jiao.com No. 215, Lianhe North Road, Fengxian District, Shanghai, China

