

## Petroquimica Triunfo Trithene® TX 3003 LDPE - Shrink Wrap Film

Category : Polymer , Film , Thermoplastic , Polyethylene (PE) , LDPE

### Material Notes:

The Trithene® TX 3003 resin is a low-density polyethylene (LDPE) with high molecular weight, presenting excellent mechanical properties. The product provided elevated gloss and transparency, adding value to the printing and finish of the films. Its superior density in comparison to conventional LDPE allows the production of flasks with a greater stiffness and better resistance to the temperatures applied in sterilization processes in autoclaves. Because of its narrow molecular weight distribution and its branched structure, the Trithene® TX 3003 resin provides excellent processability with conventional extruders for LDPE, offers a low consumption of energy during processing, and allows the production of films and flasks with a good dimensional uniformity and excellent surface finish. This product complies with ASTM standard D1248-IIA5 and the requirements of Brazilian and corresponding legislation of Mercosul and it is in conformity with FDA Regulations 21 CFR 177.1520 (c) 2.1, to contact with foodstuff. Applications: Shrink wrap films for the unitization of bottles of soft drinks, beer, and other beverages, vegetable oils, and hygiene and cleaning products. Bags with a high resistance for animal feed. Flexible flasks with a greater stiffness and better surface finish. Resin Properties: Compressed molded plate. Method ASTM D-1928, procedure C. Film obtained on a 50mm blow film line with barrier screw, 25:1 L/D, 1.0mm die gap, 50µm gauge, 2.3:1 BUR. Information provided by Dax Resinas

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Petroquimica-Triunfo-Trithene-TX-3003-LDPE-Shrink-Wrap-Film.php](http://www.lookpolymers.com/polymer_Petroquimica-Triunfo-Trithene-TX-3003-LDPE-Shrink-Wrap-Film.php)

Physical Properties	Metric	English	Comments
Density	0.925 - 0.927 g/cc	0.0334 - 0.0335 lb/in <sup>3</sup>	ASTM D1505
Thickness	50.0 microns	1.97 mil	
Melt Index of Compound	0.23 - 0.30 g/10 min @Load 2.16 kg, Temperature 190 °C	0.23 - 0.30 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	16.0 MPa	2320 psi	ASTM D638
Tensile Strength, Yield	12.0 MPa	1740 psi	ASTM D638
Film Elongation at Break, MD	325 %	325 %	ASTM D882
Film Elongation at Break, TD	675 %	675 %	ASTM D882
Elongation at Break	620 %	620 %	ASTM D638
Secant Modulus, MD	0.125 GPa	18.1 ksi	5%; ASTM D882
Secant Modulus, TD	0.130 GPa	18.9 ksi	5%; ASTM D882
Coefficient of Friction, Dynamic	0.45	0.45	ASTM D1894

Elmendorf Tear Strength, MD Mechanical Properties	7.00 g/micron Metric	178 g/mil English	ASTM D1922 Comments
Elmendorf Tear Strength, TD	5.60 g/micron	142 g/mil	ASTM D1922
Dart Drop Test	200 g	0.441 lb	(method A); ASTM D1709
Film Tensile Strength at Break, MD	27.0 MPa	3920 psi	ASTM D882
Film Tensile Strength at Break, TD	24.0 MPa	3480 psi	ASTM D882

Thermal Properties	Metric	English	Comments
Vicat Softening Point	114 °C	237 °F	ASTM D1525

Optical Properties	Metric	English	Comments
Haze	7.5 %	7.5 %	ASTM D1003
Gloss	96 %	96 %	@ 60° Gardner; ASTM D2457

Processing Properties	Metric	English	Comments
Processing Temperature	160 - 175 °C	320 - 347 °F	Plasticizing Zone
	170 - 185 °C	338 - 365 °F	Mixture Zone
Feed Temperature	150 - 165 °C	302 - 329 °F	
Adapter Temperature	180 - 195 °C	356 - 383 °F	
Die Opening	0.0800 - 0.100 cm	0.0315 - 0.0394 in	
Blow-up Ratio (BUR)	3.0	3.0	Recommended

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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