

## Petroquimica Triunfo Trithene® TX 7003 LDPE - Heavy Duty and Industrial Film

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

### Material Notes:

The Trithene® TX 7003 resin is a low-density, high molecular-weight polyethylene that offers high mechanical strength and environmental stress cracking resistance (ESCR). Additionally, this product can be easily welded, which is fundamental to satisfy the requirements of cutting, welding and/or bagging lines. The product characteristics allow for a high versatility and use in various applications due to its easy processing and high compatibility with other types of polyethylene. Trithene® TX 7003 resin shows excellent performance with conventional extruders and low energy consumption during processing, which allows producing packaging with dimensional uniformity and excellent surface finishing. This product complies with ASTM standard D1248-IA5 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: Heavy duty bags, shrink film and agricultural film. Technical films for high-strength industrial packaging, waterproofing films. Blow-molded bottles with higher stress cracking resistance - ESCR. Blends with HDPE and LLDPE for extrusion and molding processes. 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-7003-LDPE-Heavy-Duty-and-Industrial-Film.php](http://www.lookpolymers.com/polymer_Petroquimica-Triunfo-Trithene-TX-7003-LDPE-Heavy-Duty-and-Industrial-Film.php)

Physical Properties	Metric	English	Comments
Density	0.921 - 0.923 g/cc	0.0333 - 0.0333 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	17.0 MPa	2470 psi	ASTM D638
Tensile Strength, Yield	11.0 MPa	1600 psi	ASTM D638
Film Elongation at Break, MD	300 %	300 %	ASTM D882
Film Elongation at Break, TD	625 %	625 %	ASTM D882
Elongation at Break	585 %	585 %	ASTM D638
Secant Modulus, MD	0.115 GPa	16.7 ksi	5%; ASTM D882
Secant Modulus, TD	0.125 GPa	18.1 ksi	5%; ASTM D882
Coefficient of Friction, Dynamic	0.45	0.45	ASTM D1894
Elmendorf Tear Strength, MD	6.00 g/micron	152 g/mil	ASTM D1922

Mechanical Properties	Metric	English	Comments
Dart Drop Test	190 g	0.419 lb	(method A); ASTM D1709
Film Tensile Strength at Break, MD	27.0 MPa	3920 psi	ASTM D882
Film Tensile Strength at Break, TD	23.5 MPa	3410 psi	ASTM D882

Thermal Properties	Metric	English	Comments
Vicat Softening Point	94.0 °C	201 °F	ASTM D1525

Processing Properties	Metric	English	Comments
Processing Temperature	170 - 180 °C	338 - 356 °F	Plasticizing Zone
	180 - 190 °C	356 - 374 °F	Mixture Zone
Feed Temperature	160 - 175 °C	320 - 347 °F	
Adapter Temperature	185 - 205 °C	365 - 401 °F	
Blow-up Ratio (BUR)	3.0	3.0	Recommended

## Contact Songhan Plastic Technology Co.,Ltd.

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