

## Petroquimica Triunfo Trithene® TS 7045 LDPE - Film - Plastification

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

### Material Notes:

The Trithene TS 7045 resin is a low-density polyethylene (LDPE) with an excellent processability, which allows for a low energy consumption during extrusion and warrants the production of thin films with good appearance and optical properties, uniform thickness, strong heat sealing characteristics, and a good barrier to water vapor. The additive package warrants thermal stability, low blocking, and adequate coefficient of friction - COF, which are required to allow high productivity on the extrusion, printing and finishing lines. This product complies with ASTM standard D1248-IA3 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: Films for structure-plastified of paper, cardboard. High transparency, very thin films. 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-TS-7045-LDPE-Film-Plastification.php](http://www.lookpolymers.com/polymer_Petroquimica-Triunfo-Trithene-TS-7045-LDPE-Film-Plastification.php)

| Physical Properties    | Metric   | English  | Comments   |
|------------------------|--|--|------------|
| Density                | 0.922 - 0.925 g/cc   | 0.0333 - 0.0334 lb/in³                                     | ASTM D1505 |
| Thickness              | 50.0 microns   | 1.97 mil   |            |
| Melt Index of Compound | 4.0 - 5.0 g/10 min<br>@Load 2.16 kg,<br>Temperature 190 °C | 4.0 - 5.0 g/10 min<br>@Load 4.76 lb,<br>Temperature 374 °F | ASTM D1238 |

| Mechanical Properties            | Metric        | English   | Comments      |
|----------------------------------|---------------|-----------|---------------|
| Tensile Strength at Break        | 12.0 MPa      | 1740 psi  | ASTM D638     |
| Tensile Strength, Yield          | 10.0 MPa      | 1450 psi  | ASTM D638     |
| Film Elongation at Break, MD     | 350 %         | 350 %     | ASTM D882     |
| Film Elongation at Break, TD     | 650 %         | 650 %     | ASTM D882     |
| Elongation at Break              | 540 %         | 540 %     | ASTM D638     |
| Secant Modulus, MD               | 0.0900 GPa    | 13.1 ksi  | 5%; ASTM D882 |
| Secant Modulus, TD               | 0.0990 GPa    | 14.4 ksi  | 5%; ASTM D882 |
| Coefficient of Friction, Dynamic | 0.090         | 0.090     | ASTM D1894    |
| Elmendorf Tear Strength, MD      | 12.0 g/micron | 305 g/mil | ASTM D1922    |
| Elmendorf Tear Strength, TD      | 6.50 g/micron | 165 g/mil | ASTM D1922    |

| Dart Drop Test<br>Mechanical Properties | 125 g<br>Metric | 0.275 lb<br>English | (method A): ASTM D1709<br>Comments |
|---|-----------------|---------------------|------------------------------------|
| Film Tensile Strength at Break, MD      | 18.5 MPa        | 2680 psi            | ASTM D882                          |
| Film Tensile Strength at Break, TD      | 15.5 MPa        | 2250 psi            | ASTM D882                          |

| Optical Properties | Metric | English | Comments                  |
|--------------------|--------|---------|---------------------------|
| Haze               | 8.8 %  | 8.8 %   | ASTM D1003                |
| Gloss              | 63 %   | 63 %    | 45° - Gardner; ASTM D2457 |
|                    | 105 %  | 105 %   | @ 60° Gardner; ASTM D2457 |

| Processing Properties  | Metric       | English      | Comments          |
|------------------------|--------------|--------------|-------------------|
| Processing Temperature | 145 - 160 °C | 293 - 320 °F | Plasticizing Zone |
|                        | 150 - 165 °C | 302 - 329 °F | Mixture Zone      |
| Feed Temperature       | 135 - 150 °C | 275 - 302 °F |                   |
| Adapter Temperature    | 160 - 175 °C | 320 - 347 °F |                   |
| Blow-up Ratio (BUR)    | 3.5          | 3.5          | 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