



# Linear Low Density Polyethylene

## Aramco LLDPE F2111BS

### Product Description

Aramco LLDPE F2111BS is a linear low density polyethylene resin and is typically used for blown film applications. Films made from this resin typically exhibits good optical properties, impact strength and tensile properties.

This product contains high level of both slip and anti-blocking agents.

### Typical Applications

Heavy duty liner, carrier bag, garment packaging, mulch film, garbage bag.

This product is not intended for use in medical and pharmaceutical applications.

| Physical Properties            | Unit                  | Test Method        | Value <sup>(1)</sup> |      |
|--------------------------------|-----------------------|--------------------|----------------------|------|
| Melt Flow Index (190°C/2.16kg) | g/10min               | ASTM D1238         | 1.1                  |      |
| Density                        | g/cm <sup>3</sup>     | ASTM D792 Method A | 0.921                |      |
| Melting Point                  | °C                    | DSC                | 122                  |      |
| Film Properties <sup>(2)</sup> |                       |                    |                      |      |
| Tensile Strength at Break      | MD                    | MPa                | ASTM D882            | 35   |
|                                | TD                    |                    |                      | 30   |
| Tensile Elongation at Break    | MD                    | %                  | ASTM D882            | 740  |
|                                | TD                    |                    |                      | 840  |
| 1% Secant Modulus              | MD                    | MPa                | ASTM D882            | 205  |
|                                | TD                    |                    |                      | 250  |
| Elmendorf Tear Strength        | MD                    | gf                 | ASTM D1922           | 135  |
|                                | TD                    |                    |                      | 400  |
| Dart Drop Impact               | g                     | ASTM D1709         |                      | 115  |
| Haze                           | %                     | ADTM D1003         |                      | 10   |
| Gloss 45 degree                |                       | ASTM D2457         |                      | 85   |
| Blocking Load                  | gf/100cm <sup>2</sup> | ASTM D3354         |                      | 14   |
| Coefficient of Friction        | Static                | ASTM D1894         |                      | 0.10 |
|                                | Kinetic               |                    |                      | 0.08 |

(1) Typical values only, not to be construed as specification limits

(2) Film fabrication conditions: Extruder 55mmφ, Die 125mmφ, Die Gap 2 mm, Temp 200°C, Output 30kg/hr., BUR 2.0, Thickness 30μm

**Processing conditions:** Recommended melt temperature: 180 – 200 °C

**Storage and handling:** Aramco LLDPE F2111BS should be stored in a dry cool place with adequate ventilation and protected from UV-light at temperature below 50 °C

**Food Contact and other Regulations:** Aramco LLDPE F2111BS resins are suitable for food contact applications. Detailed information is provided in Material Safety Datasheet and for additional specific information, please contact Saudi Aramco Products Trading Company for certificates.

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