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## EFDA-7047

## LLDPE Film Extrusion Resin

### DESCRIPTION

EFDA-7047 is a linear low-density polyethylene (LLDPE) resin for tubular blown film extrusion. Films made from this resin have good toughness, high tensile strength and puncture resistance. EFDA-7047 does not contain any slip or antiblocking agent.

### APPLICATIONS

- Industrial liners.
- Blown film stretch wrap.
- Heavy-duty films.
- General-purpose blown films for a variety of applications.

### TYPICAL PROPERTIES

| Properties                    |    | Units             | Test Method   | Typical Value |
|-------------------------------|----|-------------------|---------------|---------------|
| <b>Resin Properties</b>       |    |                   |               |               |
| Melt Index, I <sub>2,16</sub> |    | g/10 min          | ASTM D 1238   | 1.0           |
| Density                       |    | g/cm <sup>3</sup> | ASTM D792     | 0.918         |
| Melting Point                 |    | °C                | EQUATE        | 124           |
| Bulk Density                  |    | Kg/m <sup>3</sup> | ASTM D 1895   | 538           |
| <b>Blown Film Properties*</b> |    |                   |               |               |
| Gauge                         |    | Microns           |               | 25            |
| Tensile Strength@ Break       | MD | MPa               | ASTM D 882    | 34            |
|                               | TD |                   |               | 26            |
| 1% Secant Modulus             | MD | MPa               | ASTM D 882    | 193           |
|                               | TD |                   |               | 221           |
| Elmendorf Tear                | MD | N/mm              | ASTM D 1922   | 35            |
|                               | TD |                   |               | 135           |
| Dart Impact, F <sub>50</sub>  |    | g                 | ASTM D 1709 A | 105           |
| Puncture Energy               |    | J/mm              | EQUATE        | 70            |
| Haze                          |    | %                 | ASTM D 1003   | 11            |
| Gloss, 45°                    |    | -                 | ASTM D 2457   | 65            |

\* Film properties are typical of blown film extruded at 2:1 blow-up ratio.

Actual properties may vary depending upon operating conditions and additive package.

ASTM: American Society for Testing and Materials

### TYPICAL EXTRUSION CONDITIONS

The typical melt temperatures for EFDA-7047 are in the range of 180 to 210°C using die gaps of 1.8mm or greater. Temperatures may differ depending on the extrusion equipment, blend ratio of EFDA-7047 to LDPE and the type of film produced.

### FOOD CONTACT USAGE

EFDA-7047 meets US FDA and EC regulations for food contact use. Specific certificates are available upon request.

### AVAILABILITY

EFDA-7047 is supplied in 25-Kg bags in secured pallets of 55 bags (1.375 MT net). It is also supplied in sea bulk containers of up to 20 MT capacity.

### STORAGE AND HANDLING

EFDA-7047 is supplied in pellet form and is readily conveyed on conventional polyethylene bulk handling equipment. The bulk handling system should be designed to prevent accumulation of fines and dust particles that can pose an explosion hazard. Ensure all equipment is properly grounded. The product should be stored in a cool dry shaded area away from dust, sunlight and heat. For more details on storage and handling see our Polyethylene



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Storage and Handling Guide. Also carefully review the Material Safety Data Sheet supplied with this product for health, safety and waste considerations.

#### **IMPORTANT NOTICE**

The information supplied in this bulletin to the best of our knowledge is accurate and factual as of the date printed. It is offered solely as a convenience to EQUATE's customers and is intended only as a guide for EFDA-7047. Since the user's specific applications and conditions of use are beyond EQUATE's control, EQUATE makes no warranty or representation regarding results that may be obtained by the user. It shall be the responsibility of the user to determine the suitability of the product for the user's specific application. The information disclosed in this document is not to be construed as a recommendation to use the product in infringement of any patent rights covering the usage.

#### **NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS**

EQUATE Petrochemical Company does not recommend any EQUATE product or sample product for use: (A) in any commercial or developmental application which is intended for contact with human internal body fluids or body tissues, regardless of the length of time involved. (B) in any cardiac prosthetic device application, regardless of the length of the time involved, including, without limitation, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass assisted devices; (C) as a critical component in any medical device that supports or sustains human life; and (D) specifically by pregnant women or in any applications designed specifically to promote or interfere with human reproduction.

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