

# **EFDC-7087**

## **LLDPE Film Extrusion Resin**

#### DESCRIPTION

EFDC-7087 is a linear low-density polyethylene (LLDPE) resin for tubular blown film extrusion. Films made from EFDC-7087 have good toughness, high tensile strength and outstanding puncture resistance. EFDC-7087 contains high levels of slip and antiblocking agent. The product offers excellent draw down capability for thinner gauge film production. The films have good seal-ability and machinability for easy conversion on high-speed machines

## APPLICATIONS

EFDC-7087 is recommended for the manufacture of thin gauge liner films, garment bags and other industrial and consumer packaging applications requiring toughness and puncture resistance.

## TYPICAL PROPERTIES

| Properties                    |    | Units             | Test Method   | Typical Value |
|-------------------------------|----|-------------------|---------------|---------------|
| Resin Properties              |    |                   |               |               |
| 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   | 530           |
| Blown Film Properties*        |    |                   |               |               |
| 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   | 14            |
| Gloss, 45°                    |    | -                 | ASTM D 2457   | 55            |

<sup>\*</sup> 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

| Property          | Condition |
|-------------------|-----------|
| Barrel Zone 1, °C | 175       |
| Barrel Zone 2, °C | 185       |
| Barrel Zone 3, °C | 190       |
| Barrel Zone 4, °C | 185       |
| Adapter, °C       | 185       |
| Head and Die, °C  | 185       |
| Melt Temperature, | 185       |
| Die Gap, mm       | > 1.8     |

## FOOD CONTACT USAGE

 $EFDC-7087\ meets\ US\ FDA\ and\ EC\ regulations\ for\ food\ contact\ use.\ Specific\ certificates\ are\ available\ upon\ request.$ 

## **AVAILABILITY**

EFDC-7087 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.



## STORAGE AND HANDLING

EFDC-7087 is supplied in pellet form and is readily conveyed on conventional polyethylene bulk handing 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 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 EFDC-7087. 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.

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