

# Exact™ 3027

## Ethylene-based Plastomer Resin

### Product Description

EXACT 3027 is an ethylene-based butene plastomer produced using ExxonMobil Chemical's EXXPOL® Catalyst Technology. EXACT 3027 is designed for both monolayer and multilayer coextruded cast film applications requiring excellent toughness and heat sealing performance. Typical applications include seal layers for meat, poultry, and cheese packaging, lamination films, heavy duty bags, and cereal box liner packaging.

### General

|                           |                 |                   |                           |
|---------------------------|-----------------|-------------------|---------------------------|
| Availability <sup>1</sup> | ▪ Latin America | ▪ North America   |                           |
| Additive                  | ▪ Antiblock: No | ▪ Slip: No        | ▪ Thermal Stabilizer: Yes |
| Applications              | ▪ Cast Film     | ▪ Heavy Duty Bags | ▪ Lamination Film         |
| Form(s)                   | ▪ Pellets       |                   |                           |
| Revision Date             | ▪ 03/01/2010    |                   |                           |

### Resin Properties

|   | Typical Value (English) | Typical Value (SI)      | Test Based On     |
|---|-------------------------|-------------------------|-------------------|
| Density                                 | 0.900 g/cm <sup>3</sup> | 0.900 g/cm <sup>3</sup> | ASTM D1505        |
| Melt Index <sup>2</sup> (190°C/2.16 kg) | 3.5 g/10 min            | 3.5 g/10 min            | ASTM D1238        |
| Peak Melting Temperature                | 196 °F                  | 91 °C                   | ExxonMobil Method |

### Thermal

|                                      | Typical Value (English) | Typical Value (SI) | Test Based On     |
|--------------------------------------|-------------------------|--------------------|-------------------|
| Vicat Softening Temperature          | 176 °F                  | 80.0 °C            | ExxonMobil Method |
| Crystallization Peak, T <sub>c</sub> | 165 °F                  | 74 °C              | ExxonMobil Method |

### Film Properties

|                               | Typical Value (English) | Typical Value (SI) | Test Based On     |
|-------------------------------|-------------------------|--------------------|-------------------|
| Tensile Strength at Yield MD  | 910 psi                 | 6.2 MPa            | ASTM D882         |
| Tensile Strength at Yield TD  | 630 psi                 | 4.4 MPa            | ASTM D882         |
| Tensile Strength at Break MD  | 8300 psi                | 60 MPa             | ASTM D882         |
| Tensile Strength at Break TD  | 5200 psi                | 36 MPa             | ASTM D882         |
| Elongation at Yield MD        | 10 %                    | 10 %               | ASTM D882         |
| Elongation at Yield TD        | 8 %                     | 8 %                | ASTM D882         |
| Elongation at Break MD        | 490 %                   | 490 %              | ASTM D882         |
| Elongation at Break TD        | 810 %                   | 810 %              | ASTM D882         |
| Secant Modulus MD - 1% Secant | 9700 psi                | 67 MPa             | ASTM D882         |
| Secant Modulus TD - 1% Secant | 11000 psi               | 79 MPa             | ASTM D882         |
| Dart Drop Impact              | 120 g                   | 120 g              | ASTM D1709        |
| Elmendorf Tear Strength MD    | 50 g                    | 50 g               | ASTM D1922        |
| Elmendorf Tear Strength TD    | 230 g                   | 230 g              | ASTM D1922        |
| Puncture Force                | 14 lbf                  | 62 N               | ExxonMobil Method |
| Puncture Energy               | 57 in-lb                | 6.5 J              | ExxonMobil Method |

### Optical Properties

|             | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------|-------------------------|--------------------|---------------|
| Gloss (45°) | 94                      | 94                 | ASTM D2457    |
| Haze        | 0.4 %                   | 0.4 %              | ASTM D1003    |

### Legal Statement

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

This product is not intended for use in medical applications and should not be used in any such applications.

### Processing Statement

Film (1 mil / 25.4 micron) made from Exact 3027 on a 3.5 inch cast film line with a 5 inch melt curtain, 78°F (26°C) chill roll temperature at a 500 ft/min take-off speed and a melt temperature between 532-550°F (277-288°C).

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#### Notes

Typical properties: these are not to be construed as specifications.

<sup>1</sup> Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

<sup>2</sup> Value reported is an estimate based on ExxonMobil's correlation from melt flow rate data measured at other standard conditions, based on ASTM D 1238.

For additional technical, sales and order assistance: [www.exxonmobilchemical.com/ContactUs](http://www.exxonmobilchemical.com/ContactUs)

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