

Exceed™ 1018MA

Performance Polymer

Product Description

Exceed 1018MA is an ethylene 1-hexene copolymer. Films made from Exceed 1018MA have outstanding tensile, impact strength and puncture. These superior strength properties, along with excellent drawability, makes this a very versatile packaging film resin. TnPP is not intentionally added to Exceed 1018MA.

General

| | | | |
|---------------------------|---|---|---|
| Availability ¹ | <ul style="list-style-type: none"> Africa & Middle East Asia Pacific | <ul style="list-style-type: none"> Europe Latin America | <ul style="list-style-type: none"> North America |
| Additive | Exceed 1018MA: Antiblock: No; Slip: No; Processing Aid: Yes; Thermal Stabilizer: Yes | | |
| Applications | <ul style="list-style-type: none"> Agricultural Film Bag in Box Barrier Food Packaging Blown Film Blown Stretch Film Bread Bags | <ul style="list-style-type: none"> Food Packaging Form Fill And Seal Packaging Freezer Film General Packaging Heavy Duty Bags Lamination Film | <ul style="list-style-type: none"> Multilayer Packaging Film Overwrap Film Packaging Films Premium Trash Bags Stand Up Pouches Trash Bags |
| Revision Date | 05/22/2018 | | |

Resin Properties

| | Typical Value (English) | Typical Value (SI) | Test Based On |
|----------------------------|-------------------------|-------------------------|-------------------|
| Density | 0.918 g/cm ³ | 0.918 g/cm ³ | ASTM D1505 |
| Melt Index (190°C/2.16 kg) | 1.0 g/10 min | 1.0 g/10 min | ASTM D1238 |
| Peak Melting Temperature | 245 °F | 118 °C | ExxonMobil Method |

Film Properties

| | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------------------------|-------------------------|--------------------|-------------------|
| Tensile Strength at Yield MD | 1400 psi | 9.5 MPa | ASTM D882 |
| Tensile Strength at Yield TD | 1400 psi | 9.7 MPa | ASTM D882 |
| Tensile Strength at Break MD | 8500 psi | 60 MPa | ASTM D882 |
| Tensile Strength at Break TD | 7700 psi | 50 MPa | ASTM D882 |
| Elongation at Break MD | 480 % | 480 % | ASTM D882 |
| Elongation at Break TD | 640 % | 640 % | ASTM D882 |
| Secant Modulus MD - 1% Secant | 27000 psi | 180 MPa | ASTM D882 |
| Secant Modulus TD - 1% Secant | 29000 psi | 200 MPa | ASTM D882 |
| Dart Drop Impact | 590 g | 590 g | ASTM D1709A |
| Elmendorf Tear Strength MD | 250 g | 250 g | ASTM D1922 |
| Elmendorf Tear Strength TD | 430 g | 430 g | ASTM D1922 |
| Puncture Force | 11 lbf | 50 N | ExxonMobil Method |
| Puncture Energy | 35 in-lb | 3.9 J | ExxonMobil Method |

Optical Properties

| | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------|-------------------------|--------------------|---------------|
| Gloss (45°) | 28 | 28 | ASTM D2457 |
| Haze | 29 % | 29 % | ASTM D1003 |

Legal Statement

Tris(nonylphenol)phosphite (TNPP) CAS# 26523-78-4 is not intentionally used by ExxonMobil in this product. Although this product is not routinely tested for its presence, based on product composition knowledge this substance is not expected to be present. However, the fact that this substance is not intentionally used by ExxonMobil in this product does not exclude that trace levels of this substance may be present as a result of the specific characteristics of the raw materials and/or of the manufacturing process.

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

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

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Processing Statement

Film (1 mil/25.4 micron) made on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 390 -410°F (199 - 210°C), a 60 mil (1.52 mm) die gap at a rate of 10 lbs/hr/in die circumference (1.79 kg/hr/cm).

Notes

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

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

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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