

# Exceed™ 1518RA

## Performance Polymer

### Product Description

Exceed™ 1518RA resin is an ethylene 1-hexene copolymer resin. Films made from Exceed™ 1518RA resin have outstanding tensile, impact strength and puncture. These superior strength properties, along with excellent drawability, makes this resin a very versatile packaging film resin. TnPP is not intentionally added to Exceed™ 1518RA resin.

### General

|                           |   |
|---------------------------|---|
| Availability <sup>1</sup> | <ul style="list-style-type: none"> <li>Latin America</li> <li>North America</li> </ul>  |
| Additive                  | <ul style="list-style-type: none"> <li>Antiblock: No</li> <li>Slip: No</li> <li>Thermal Stabilizer: Yes</li> <li>Alternative Processing Aid: Yes</li> </ul>   |
| Applications              | <ul style="list-style-type: none"> <li>Bag in Box</li> <li>Barrier Food Packaging</li> <li>Blown Film</li> <li>Blown Stretch Film</li> <li>Food Packaging</li> <li>Form Fill And Seal Packaging</li> <li>General Packaging</li> <li>Heavy Duty Bags</li> <li>Ice Bags</li> <li>Packaging Films</li> <li>Premium Trash Bags</li> <li>Stand Up Pouches</li> </ul> |
| Form(s)                   | <ul style="list-style-type: none"> <li>Pellets</li> </ul>   |
| Revision Date             | <ul style="list-style-type: none"> <li>12/05/2022</li> </ul>  |

| Resin Properties           | Typical Value (English) | Typical Value (SI)      | Test Based On     |
|----------------------------|-------------------------|-------------------------|-------------------|
| Density / Specific Gravity | 0.918 g/cm <sup>3</sup> | 0.918 g/cm <sup>3</sup> | ASTM D792         |
| Melt Index (190°C/2.16 kg) | 1.5 g/10 min            | 1.5 g/10 min            | ASTM D1238        |
| Peak Melting Temperature   | 244 °F                  | 118 °C                  | ExxonMobil Method |

| Thermal                     | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------------|-------------------------|--------------------|---------------|
| Vicat Softening Temperature | 225 °F                  | 107 °C             | ASTM D1525    |

| Film Properties               | Typical Value (English) | Typical Value (SI) | Test Based On     |
|-------------------------------|-------------------------|--------------------|-------------------|
| Tensile Strength at Yield MD  | 1300 psi                | 9.1 MPa            | ASTM D882         |
| Tensile Strength at Yield TD  | 1400 psi                | 9.4 MPa            | ASTM D882         |
| Tensile Strength at Break MD  | 8600 psi                | 60 MPa             | ASTM D882         |
| Tensile Strength at Break TD  | 7900 psi                | 50 MPa             | ASTM D882         |
| Elongation at Break MD        | 540 %                   | 540 %              | ASTM D882         |
| Elongation at Break TD        | 660 %                   | 660 %              | ASTM D882         |
| Secant Modulus MD - 1% Secant | 26000 psi               | 180 MPa            | ASTM D882         |
| Secant Modulus TD - 1% Secant | 28000 psi               | 190 MPa            | ASTM D882         |
| Dart Drop Impact              | 610 g                   | 610 g              | ASTM D1709A       |
| Elmendorf Tear Strength MD    | 300 g                   | 300 g              | ASTM D1922        |
| Elmendorf Tear Strength TD    | 430 g                   | 430 g              | ASTM D1922        |
| Puncture Force                | 12 lbf                  | 51 N               | ExxonMobil Method |
| Puncture Energy               | 38 in-lb                | 4.3 J              | ExxonMobil Method |

| Optical Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|--------------------|-------------------------|--------------------|---------------|
| Gloss (45°)        | 26                      | 26                 | ASTM D2457    |
| Haze               | > 30 %                  | > 30 %             | 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 (1.61 kg/hr/cm).

### 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.

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

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