

## Product Datasheet



# Exceed™ 4518CB Cast

## Performance Polymer

### Product Description

Exceed™ 4518CB resin is an ethylene 1-hexene copolymer. Film made from Exceed™ 4518CB resin has outstanding tensile properties and impact and puncture toughness. These superior properties, along with excellent drawability, make this a versatile resin for both monolayer and multilayer packaging and cast stretch film.

### 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>Processing Aid: No</li> <li>Slip: No</li> <li>Thermal Stabilizer: Yes</li> </ul>                                         |
| Applications              | <ul style="list-style-type: none"> <li>Cast Film</li> <li>Diaper Backsheet</li> <li>Cast Stretch Film</li> <li>Hygiene film</li> <li>Packaging Films</li> <li>Personal Care</li> </ul> |
| Revision Date             | 02/23/2018                                                                                                                                                                             |

| 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) | 4.5 g/10 min            | 4.5 g/10 min            | ASTM D1238        |
| Peak Melting Temperature   | 237 °F                  | 114 °C                  | ExxonMobil Method |

| Film Properties               | Typical Value (English) | Typical Value (SI) | Test Based On     |
|-------------------------------|-------------------------|--------------------|-------------------|
| Tensile Strength at Yield MD  | 1200 psi                | 8.3 MPa            | ASTM D882         |
| Tensile Strength at Yield TD  | 1100 psi                | 7.3 MPa            | ASTM D882         |
| Tensile Strength at Break MD  | 9700 psi                | 70 MPa             | ASTM D882         |
| Tensile Strength at Break TD  | 7000 psi                | 48 MPa             | ASTM D882         |
| Elongation at Break MD        | 500 %                   | 500 %              | ASTM D882         |
| Elongation at Break TD        | 730 %                   | 730 %              | ASTM D882         |
| Secant Modulus MD - 1% Secant | 15000 psi               | 100 MPa            | ASTM D882         |
| Secant Modulus TD - 1% Secant | 18000 psi               | 120 MPa            | ASTM D882         |
| Dart Drop Impact              | 140 g                   | 140 g              | ASTM D1709A       |
| Elmendorf Tear Strength MD    | 150 g                   | 150 g              | ASTM D1922        |
| Elmendorf Tear Strength TD    | 460 g                   | 460 g              | ASTM D1922        |
| Puncture Force                | 11 lbf                  | 48 N               | ExxonMobil Method |
| Puncture Energy               | 39 in·lb                | 4.5 J              | ExxonMobil Method |

| Optical Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|--------------------|-------------------------|--------------------|---------------|
| Gloss (45°)        | 87                      | 87                 | ASTM D2457    |
| Haze               | 2.2 %                   | 2.2 %              | ASTM D1003    |

### Legal Statement

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).

### Processing Statement

Film (0.8 mil / 20 micron) obtained on a Black Clawson 3.5 inch cast line at a 5.5 inch melt curtain length, 520-580°F melt temperature, 80°F chill roll temperature and 750 fpm line speed.

### 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.

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**ExxonMobil****Exceed™ 4518CB Cast**  
Performance PolymerFor additional technical, sales and order assistance: [www.exxonmobilchemical.com/ContactUs](http://www.exxonmobilchemical.com/ContactUs)

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