Product Datasheet

# ExxonMobil™ HD 5290HLFL

## High Density Polyethylene

### Product Description

ExxonMobil™ HD 5290HLFL is a high molecular weight HDPE film grade. Films made from ExxonMobil™ HD 5290HLFL exhibit excellent impact and toughness properties as well as high stiffness.

### General

| | | | |
|---|---|---|---|
| Availability [1] | ▪ Africa & Middle East | ▪ Asia Pacific | |
| Additive | ▪ Antiblock: No | ▪ Slip: No | ▪ Thermal Stabilizer: Yes |
| Applications | ▪ Blown Film<br>▪ Grocery Sacks<br>▪ Liners | ▪ Produce Bags<br>▪ Produce Bags On A Roll<br>▪ Refuse Bags | ▪ Thin Gauged Consumer Bags<br>▪ Trash Can Liners |
| Revision Date | ▪ 09/15/2016 | | |

| Resin Properties | Typical Value (English) | | Typical Value (SI) | | Test Based On |
|---|---|---|---|---|---|
| Density | 0.952 | g/cm³ | 0.952 | g/cm³ | ASTM D1505 |
| High Load Melt Index (190°C/21.6 kg) | 9.0 | g/10 min | 9.0 | g/10 min | ASTM D1238 |
| Melt Mass-Flow Rate (MFR) (190°C/5.0 kg) | 0.32 | g/10 min | 0.32 | g/10 min | ASTM D1238 |

| Thermal | Typical Value (English) | | Typical Value (SI) | | Test Based On |
|---|---|---|---|---|---|
| Vicat Softening Temperature | 259 | °F | 126 | °C | ASTM D1525 |

| Film Properties | Typical Value (English) | | Typical Value (SI) | | Test Based On |
|---|---|---|---|---|---|
| Tensile Strength at Yield MD | 5900 | psi | 41 | MPa | ASTM D882 |
| Tensile Strength at Yield TD | 4400 | psi | 30 | MPa | ASTM D882 |
| Tensile Strength at Break MD | 8600 | psi | 60 | MPa | ASTM D882 |
| Tensile Strength at Break TD | 8100 | psi | 60 | MPa | ASTM D882 |
| Elongation at Break MD | 220 | % | 220 | % | ASTM D882 |
| Elongation at Break TD | 430 | % | 430 | % | ASTM D882 |
| Secant Modulus MD - 1% Secant | 170000 | psi | 1200 | MPa | ASTM D882 |
| Secant Modulus TD - 1% Secant | 170000 | psi | 1200 | MPa | ASTM D882 |
| Dart Drop Impact | 190 | g | 190 | g | ASTM D1709A |
| Elmendorf Tear Strength MD | 8 | g | 8 | g | ASTM D1922 |
| Elmendorf Tear Strength TD | 30 | g | 30 | g | ASTM D1922 |

### 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

The film properties have been measured on 15 µm (0.59 mil) thick films with a blow-up ratio of 4 : 1 and a frostline height of 9 x die diameter (die diameter/ gap: 120mm/1.5mm (4.7 in/0.06 in); 215°C (419°F) melt temperature; 70 kg/hr (154 lb/hr) output).

### 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.



Manufacturer website: https://www.exxonmobilchemical.com/en/products/polyethylene

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For additional technical, sales and order assistance: Contact Us

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Manufacturer website: https://www.exxonmobilchemical.com/en/products/polyethylene