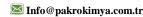
**20212 659 26 03** 



**Product Datasheet** 

# ExxonMobil™ LDPE LD 080 Series



Low Density Polyethylene Resin

## **Product Description**

ExxonMobil™ LDPE LD 080 blown film resin is a fractional melt index grade designed for demanding heavy duty film applications. It combines excellent properties with high melt strength, high bubble stability and high throughput.

| General                       |   |  |                               |                                      |                        |  |
|-------------------------------|---|--|-------------------------------|--------------------------------------|------------------------|--|
| Availability <sup>1</sup>     | <ul><li>Africa &amp; Middle East</li><li>Asia Pacific</li></ul> |  | Europe<br>Latin America       | <ul> <li>North Ame</li> </ul>        | rica                   |  |
| Additive                      | <ul> <li>LD 080.LT: Antiblock</li> </ul>                        | c: Yes; Slip: N  | o; Processing Aid: Yes; Therr | mal St <mark>abilizer: Yes</mark>    |                        |  |
|                               | <ul> <li>LD 080.BW1: Antible</li> </ul>                         | ock: No; Slip:   | No; Processing Aid: Yes; Th   | erma <mark>l Stabilizer: Ye</mark> : | S                      |  |
| Applications                  | Agricultural Film   | Agricultural Film     Construction Liners     Pallet Shrink Film |                               |                                      |                        |  |
|                               | <ul> <li>Blend Partner</li> </ul>                               |  | Food Packaging                | <ul> <li>Zipper Bag</li> </ul>       |                        |  |
|                               | <ul> <li>Collation Shrink</li> </ul>                            |  | Geomembrane                   |                                      |                        |  |
|                               | Construction Film   | •  | Heavy Duty Bags               |                                      |                        |  |
| Form(s)                       | • Pellets   |  |                               |                                      |                        |  |
| Revision Date                 | • 06/07/2022  |  |                               |                                      |                        |  |
|                               | T 1 1) ( )  | /= !: I \  | T : 1271                      | (61)                                 | T . D . 10             |  |
| Resin Properties              | Typical Value   | . 5  | Typical Value                 |                                      | Test Based On          |  |
| Density (100%C/2.17.1.)       |   | g/cm <sup>3</sup>  |                               | g/cm <sup>3</sup>                    | ASTM D1505             |  |
| Melt Index (190°C/2.16 kg)    |   | g/10 min   |                               | g/10 min                             | ASTM D1238             |  |
| Peak Melting Temperature      | 231   | °F   | 111                           | °C                                   | ExxonMobil<br>Method   |  |
| Tilas Danas atina             | Turicel Malue   | /= -l:-l-\   | T (   ) /-                    | (CI)                                 | T-+ D 1 O-             |  |
| Film Properties               | Typical Value   | . 5  | Typical Value                 | (SI)<br>MPa                          | Test Based On          |  |
| Tensile Strength at Yield MD  | 1500<br>1400  |  | 1.7                           | MPa<br>MPa                           | ASTM D882<br>ASTM D882 |  |
| Tensile Strength at Yield TD  |   |  |                               | MPa                                  | ASTM D882              |  |
| Tensile Strength at Break MD  | 3300<br>2900  |  |                               | MPa                                  | ASTM D882              |  |
| Tensile Strength at Break TD  | 100   |  | 100                           |                                      | ASTM D882<br>ASTM D882 |  |
| Elongation at Break MD        |   |  |                               |                                      |                        |  |
| Elongation at Break TD        | 520   |  | 520                           |                                      | ASTM D882              |  |
| Secant Modulus MD - 1% Secant | 24000   |  |                               | MPa                                  | ASTM D882              |  |
| Secant Modulus TD - 1% Secant | 32000   | _  |                               | MPa                                  | ASTM D882              |  |
| Dart Drop Impact              | 160   |  | 160                           |                                      | ASTM D1709A            |  |
| Elmendorf Tear Strength MD    | 290   |  | 290                           |                                      | ASTM D1922             |  |
| Elmendorf Tear Strength TD    | 100   |  | 100                           | 1.0                                  | ASTM D1922             |  |
| Puncture Force                | 12  | lbf  | 52                            | N                                    | ExxonMobil<br>Method   |  |
| Puncture Energy               | 6.9   | in·lb  | 0.78                          | J                                    | ExxonMobil<br>Method   |  |
| Optical Properties            | Typical Value   | (English)  | Typical Value                 | (SI)                                 | Test Based On          |  |
| Gloss (45°)                   | 30  | , , ,  | 30                            | ` /                                  | ASTM D2457             |  |
| Haze                          | 22  | %  | 22                            | 0/                                   | 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 (2 mil/50.8 micron) made from ExxonMobil™ LD 080 resin on a 2.5 in (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of ~381°F (194°C), a 20 mil (0.508 mm) die gap at a rate of ~150 lbs/hr.

#### Notes

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

Effective Date: 06/07/2022 Page: 1 of 2 ExxonMobil

<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.



ExxonMobil™ LDPE LD 080 Series Low Density Polyethylene Resin

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

©2022 ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

exxonmobilchemical.com

Effective Date: 06/07/2022 ExxonMobil Page: 2 of 2