



### Technical Data Sheet

## AGILITY™ EC 7000 REN Performance LDPE

Low Density Polyethylene Resin

### Overview

AGILITY™ EC 7000 REN Performance LDPE is a next generation low density polyethylene resin for high speed extrusion coating.

#### Main Characteristics:

- Recommended for extrusion at high and low temperatures
- Robustness in melt drawing
- Performance as sealant polymer

### Sustainability Attribute:



#### Complies with:

- Europe Commission Regulation (EU) No 10/2011
- U.S. FDA 21 CFR 177.1520 (c)2.1
- U.S. DFA-DMF
- ISCC PLUS certification for bio-circular plastics

Consult the regulations for complete details.

### Additive

- Antiblock: No
- Slip: No
- Processing aid: No

### Physical Properties

| Physical                   | Nominal Value | Unit (English)    | Nominal Value | Unit (SI)         | Test Method <sup>1</sup> |
|----------------------------|---------------|-------------------|---------------|-------------------|--------------------------|
| Density                    | 0.919         | g/cm <sup>3</sup> | 0.919         | g/cm <sup>3</sup> | ASTM D1505               |
| Base Density <sup>2</sup>  | 0.919         | g/cm <sup>3</sup> | 0.919         | g/cm <sup>3</sup> | Dow Method               |
| Melt Index (190°C/2.16 kg) | 3.9           | g/10 min          | 3.9           | g/10 min          | ASTM D1238               |
| <b>Mechanical</b>          |               |                   |               |                   |                          |
| Tensile Stress (Break)     | 1450          | psi               | 10.0          | MPa               | ISO 527-2                |
| Tensile Strain (Break)     | 540           | %                 | 540           | %                 | ISO 527-2                |

1. ASTM: American Society for Testing and Materials  
ISO: International Standardization Organization

2. Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm<sup>3</sup>. Base density is the estimated density of the polymer if it did not contain any antiblock.

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.



### Physical Properties (Cont.)

| Thermal                                                                          | Nominal Value | Unit (English) | Nominal Value | Unit (SI) | Test Method <sup>1</sup> |
|----------------------------------------------------------------------------------|---------------|----------------|---------------|-----------|--------------------------|
| Melting Temperature (DSC)                                                        | 230           | °F             | 110           | °C        | Dow Method               |
| <b>Extrusion</b>                                                                 |               |                |               |           |                          |
| Draw Down from 15 g/m <sup>2</sup> @ 100 m/min <sup>2</sup> at (608°F / (320°C)) | 1600          | ft/min         | 500           | m/min     | Dow Method               |
| Neck-in 25 g/m <sup>2</sup> @ 100 mpm <sup>2</sup> at (608°F / (320°C))          | 5.8           | in             | 148.0         | mm        | Dow Method               |

3. Coating onto paper substrate and/or coating web at 250 mm air gap and -15 mm nip offset.

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