



# ELITE™ 5960G

## Enhanced Polyethylene Resin

### Overview

Main Characteristics:

- HDPE with excellent moisture barrier
- Processes with low back pressure and excellent bubble stability

Complies with:

- U.S. FDA 21 CFR 177.1520 (c) 2.2
- EU, No 10/2011
- Canadian HPFB No Objection

Consult the regulations for complete details.

### Additive

- Antiblock: 3000 ppm
- Slip: No
- Processing Aid: No

| Physical                    | Nominal Value (English)    | Nominal Value (SI)      | Test Method             |
|-----------------------------|----------------------------|-------------------------|-------------------------|
| Density                     | 0.962 g/cm <sup>3</sup>    | 0.962 g/cm <sup>3</sup> | ASTM D792               |
| Base Density                | 0.960 g/cm <sup>3</sup>    | 0.960 g/cm <sup>3</sup> | Dow Method <sup>1</sup> |
| Melt Index (190°C/2.16 kg)  | 0.85 g/10 min              | 0.85 g/10 min           | ASTM D1238              |
| Films                       | Nominal Value (English)    | Nominal Value (SI)      | Test Method             |
| Film Thickness - Tested     | 1.0 mil                    | 25 µm                   |                         |
| Film Puncture Energy        | 3.00 in·lb                 | 0.339 J                 |                         |
| Film Puncture Force         | 3.00 lbf                   | 13.3 N                  |                         |
| Film Puncture Resistance    | 17.0 ft·lb/in <sup>3</sup> | 1.41 J/cm <sup>3</sup>  | Dow Method              |
| Film Toughness              |                            |                         | ASTM D882               |
| MD                          | 1700 ft·lb/in <sup>3</sup> | 141 J/cm <sup>3</sup>   |                         |
| TD                          | 1550 ft·lb/in <sup>3</sup> | 128 J/cm <sup>3</sup>   |                         |
| Secant Modulus              |                            |                         | ASTM D882               |
| 1% Secant, MD               | 163000 psi                 | 1120 MPa                |                         |
| 2% Secant, MD               | 127000 psi                 | 876 MPa                 |                         |
| 1% Secant, TD               | 193000 psi                 | 1330 MPa                |                         |
| 2% Secant, TD               | 148000 psi                 | 1020 MPa                |                         |
| Tensile Strength            |                            |                         | ASTM D882               |
| MD: Yield                   | 4100 psi                   | 28.3 MPa                |                         |
| TD: Yield                   | 4400 psi                   | 30.3 MPa                |                         |
| MD: Break                   | 5400 psi                   | 37.2 MPa                |                         |
| TD: Break                   | 3500 psi                   | 24.1 MPa                |                         |
| Tensile Elongation          |                            |                         | ASTM D882               |
| MD: Break                   | 500 %                      | 500 %                   |                         |
| TD: Break                   | 600 %                      | 600 %                   |                         |
| Dart Drop Impact            | 40 g                       | 40 g                    | ASTM D1709A             |
| Elmendorf Tear Strength     |                            |                         | ASTM D1922 <sup>2</sup> |
| MD                          | 13 g                       | 13 g                    |                         |
| TD                          | 400 g                      | 400 g                   |                         |
| Thermal                     | Nominal Value (English)    | Nominal Value (SI)      | Test Method             |
| Vicat Softening Temperature | 266 °F                     | 130 °C                  | ASTM D1525              |
| Melting Temperature (DSC)   | 273 °F                     | 134 °C                  | Dow Method              |
| Optical                     | Nominal Value (English)    | Nominal Value (SI)      | Test Method             |
| Gloss (45°)                 | 14                         | 14                      | ASTM D2457              |
| Haze                        | 42 %                       | 42 %                    | ASTM D1003              |

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**Extrusion Notes**

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Fabrication Conditions For Blown Film:  
Screw Size: 3.5 in  
Screw Type: DSB II  
Die Gap: 70 mil (1.7 mm)  
Melt Temperature: 425°F  
Output: 12 lb/hr/in of die circumference  
Die Diameter: 8 in.  
Blow-Up Ratio: 2.5 to 1  
Frost Line Height: 33 in.

**Notes**

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

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<sup>1</sup> 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.

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<sup>2</sup> Method B

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|----------------------|------------------|---------------------------|----------------|
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| U.S. & Canada:       | 1-800-441-4369   |                           | +31-11567-2626 |
|                      | 1-989-832-1426   | Italy:                    | +800-783-825   |
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| Colombia:            | +57-1-219-6000   | <b>Asia Pacific</b>       | +800-7776-7776 |
| Mexico:              | +52-55-5201-4700 |                           | +603-7965-5392 |

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