



## ELITE™ 5230G

The Dow Chemical Company - Enhanced Polyethylene Resin

Tuesday, November 5, 2019

### General Information

#### Product Description

ELITE™ 5230G Enhanced Polyethylene Resin is produced via INSITE™ Technology from Dow. This resin offers high impact strength and good puncture resistance at moderate stretch levels for irregularly shaped loads. In addition, this resin provides excellent extensibility for higher yields on regular loads.

- Excellent extensibility
- High impact and puncture resistance

Complies with:

- U.S. FDA FCN 424
- Canadian HPFB No Objection
- EU, No 10/2011
  - Consult the regulations for complete details.

#### General

|                   |                                                                  |
|-------------------|------------------------------------------------------------------|
| Material Status   | • Commercial: Active                                             |
| Availability      | • Asia Pacific<br>• Europe<br>• Latin America<br>• North America |
| Additive          | • Antiblock: No<br>• Processing Aid: No<br>• Slip: No            |
| Agency Ratings    | • EU No 10/2011<br>• FDA FCN 424<br>• HPFB (Canada) No Objection |
| Forms             | • Pellets                                                        |
| Processing Method | • Cast Film<br>• Injection Molding                               |

### ASTM & ISO Properties<sup>1</sup>

| Physical                                    | Nominal Value | Unit                  | Test Method     |
|---------------------------------------------|---------------|-----------------------|-----------------|
| Density / Specific Gravity                  | 0.918         |                       | ASTM D792       |
| Melt Mass-Flow Rate (190°C/2.16 kg)         | 4.0           | g/10 min              | ASTM D1238      |
| Films                                       | Nominal Value | Unit                  | Test Method     |
| Film Thickness - Tested                     | 1             | mil                   |                 |
| Film Puncture Force <sup>2</sup> (0.80 mil) | 11.0          | lbf                   | Internal Method |
| Film Puncture Resistance (0.80 mil)         | 326           | ft-lb/in <sup>3</sup> | Internal Method |
| Tensile Strength - MD (Yield, 0.80 mil)     | 1320          | psi                   | ASTM D882       |
| Tensile Strength - TD (Yield, 0.80 mil)     | 1220          | psi                   | ASTM D882       |
| Tensile Strength - MD (Break, 0.80 mil)     | 6670          | psi                   | ASTM D882       |
| Tensile Strength - TD (Break, 0.80 mil)     | 5520          | psi                   | ASTM D882       |
| Tensile Elongation - MD (Break, 0.80 mil)   | 540           | %                     | ASTM D882       |
| Tensile Elongation - TD (Break, 0.80 mil)   | 720           | %                     | ASTM D882       |
| Dart Drop Impact (0.80 mil)                 | 320           | g                     | ASTM D1709B     |
| Elmendorf Tear Strength - MD (0.80 mil)     | 310           | g                     | ASTM D1922      |
| Elmendorf Tear Strength - TD (0.80 mil)     | 510           | g                     | ASTM D1922      |
| Ultimate Stretch <sup>3</sup> (0.8 mil)     | 330           | %                     | Internal Method |
| Thermal                                     | Nominal Value | Unit                  | Test Method     |
| Melting Temperature (DSC)                   | 252           | °F                    | Internal Method |
| Optical                                     | Nominal Value | Unit                  | Test Method     |
| Gloss (45°, 0.800 mil)                      | 95            |                       | ASTM D2457      |

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| Optical          | Nominal Value | Unit | Test Method |
|------------------|---------------|------|-------------|
| Haze (0.800 mil) | 0.500         | %    | ASTM D1003  |

### Processing Information

| Extrusion        | Nominal Value | Unit |
|------------------|---------------|------|
| Melt Temperature | 520           | °F   |

#### Extrusion Notes

Fabrication Conditions For Cast Film:

- Die Gap: 20 mil (0.50 mm)
- Melt Temperature: 520°F (271°C)
- Air Gap: 3 in. (7.6cm)
- Haul Off Speed: 600 fpm (183 m/min)

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 250% pre-stretch; On-Pallet testing.

<sup>3</sup> On-Pallet testing