



Technical Data Sheet

## ELITE™ AT 6507 Enhanced Polyethylene Resin

### Overview

ELITE™ AT 6507 Enhanced Polyethylene Resin is a copolymer produced via INSITE™ technology from Dow. It is designed for stretch hooder application and offers a unique combination of holding force, elastic recovery, optics and toughness.

### Sustainability Attribute:



#### Main Characteristics:

- Excellent elastic recovery and holding force
- Very high impact resistance and tear properties
- Ease of processing

#### Complies with:

- U.S. FDA FCN 424
- EU, 10/2011

Consult the regulations for complete details.

### Physical Properties

| Physical                   | Nominal Value | Unit (English)        | Nominal Value | Unit (SI)         | Test Method <sup>1</sup> |
|----------------------------|---------------|-----------------------|---------------|-------------------|--------------------------|
| Density                    | 0.902         | g/cm <sup>3</sup>     | 0.902         | g/cm <sup>3</sup> | ASTM D792                |
| Melt Index (190°C/2.16 kg) | 0.85          | g/10 min              | 0.85          | g/10 min          | ASTM D1238               |
| <b>Films</b>               |               |                       |               |                   |                          |
| Film Thickness — Tested    | 2             | mil                   | 50            | µm                |                          |
| Film Puncture Energy       | 30.1          | in·lb                 | 3.40          | J                 | Dow Method               |
| Film Puncture Force        | 10.1          | lbf                   | 45.0          | N                 | Dow Method               |
| Film Puncture Resistance   | 99.1          | ft·lb/in <sup>3</sup> | 8.20          | J/cm <sup>3</sup> | Dow Method               |
| Film Toughness             |               |                       |               |                   | ASTM D882                |
| MD                         | 581           | ft·lb/in <sup>3</sup> | 48.1          | J/cm <sup>3</sup> |                          |
| TD                         | 483           | ft·lb/in <sup>3</sup> | 40.0          | J/cm <sup>3</sup> |                          |

1. ASTM: American Society for Testing and Materials

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



## Physical Properties (Cont.)

| Films  | Nominal Value | Unit (English) | Nominal Value | Unit (SI) | Test Method |
|--|---------------|----------------|---------------|-----------|-------------|
| Tensile Strength   |               |                |               |           | ASTM D882   |
| MD: Yield  | 508           | psi            | 3.50          | MPa       |             |
| TD: Yield  | 696           | psi            | 4.80          | MPa       |             |
| MD: Break  | 3350          | psi            | 23.1          | MPa       |             |
| TD: Break  | 2710          | psi            | 18.7          | MPa       |             |
| Tensile Elongation   |               |                |               |           | ASTM D882   |
| MD: Break  | 480           | %              | 480           | %         |             |
| TD: Break  | 530           | %              | 530           | %         |             |
| Dart Drop Impact   | 1800          | g              | 1800          | g         | ASTM D1709B |
| Elmendorf Tear Strength <sup>2</sup>   |               |                |               |           | ASTM D1922  |
| MD   | 640           | g              | 640           | g         |             |
| TD   | 320           | g              | 320           | g         |             |
| <b>Optical</b>   |               |                |               |           |             |
| Gloss (45°)  | 79            |                | 79            |           | ASTM D2457  |
| Haze   | 3.00          | %              | 3.00          | %         | ASTM D1003  |
| <b>Extrusion Notes</b>   |               |                |               |           |             |
| Fabrication Conditions for Blown Film:   |               |                |               |           |             |
| <ul style="list-style-type: none"> <li>• Screw Size: 45 mm</li> <li>• Die Gap: 1.5 mm</li> <li>• Melt Temperature: 244°C</li> <li>• Output: 6.6 kg/hr/mm of die circumference</li> <li>• Die Diameter: 150 mm</li> <li>• Blow-Up Ratio: 2.5 to 1</li> <li>• Screw Speed: 59 rpm</li> </ul> |               |                |               |           |             |



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