

## Dow ELITE™ 5500G Enhanced Polyethylene Resin

Category : Polymer , Film , Thermoplastic , Polyethylene (PE) , LLDPE

### Material Notes:

ELITE™ 5500G is a copolymer produced via INSITE™ Technology. It offers an exceptional combination of processability, low heat seal initiation temperature, package integrity, optical properties, and tear strength. ELLITE™ 5500 resin complies with U.S. FDA regulation 21 CFR 177.1520 (c) 3.2a. Information provided by Dow

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Dow-ELITE-5500G-Enhanced-Polyethylene-Resin.php](http://www.lookpolymers.com/polymer_Dow-ELITE-5500G-Enhanced-Polyethylene-Resin.php)

| Physical Properties | Metric       | English                   | Comments   |
|---------------------|--------------|---------------------------|------------|
| Density             | 0.914 g/cc   | 0.0330 lb/in <sup>3</sup> | ASTM D792  |
| Thickness           | 50.8 microns | 2.00 mil                  |            |
| Melt Flow           | 1.5 g/10 min | 1.5 g/10 min              | ASTM D1238 |

| Mechanical Properties              | Metric        | English    | Comments                                                 |
|------------------------------------|---------------|------------|----------------------------------------------------------|
| Film Tensile Strength at Yield, MD | 8.501 MPa     | 1233 psi   | ASTM D882                                                |
| Film Tensile Strength at Yield, TD | 8.439 MPa     | 1224 psi   | ASTM D882                                                |
| Film Elongation at Break, MD       | 645 %         | 645 %      | ASTM D882                                                |
| Film Elongation at Break, TD       | 684 %         | 684 %      | ASTM D882                                                |
| Secant Modulus, MD                 | 0.1507 GPa    | 21.86 ksi  | 2% Secant; ASTM D882                                     |
| Secant Modulus, TD                 | 0.1755 GPa    | 25.45 ksi  | 2% Secant; ASTM D882                                     |
| Impact                             | 20            | 20         | [lb<sub>f</sub>]; Puncture Resistance Force; Dow Method  |
|                                    | 244           | 244        | [ft-lbf/in<sup>3</sup>]; Puncture Resistance; Dow Method |
| Puncture Energy                    | 8.25 J        | 6.08 ft-lb | Dow Method                                               |
| Elmendorf Tear Strength MD         | 860 g         | 860 g      | ASTM D1922                                               |
| Elmendorf Tear Strength TD         | 1140 g        | 1140 g     | ASTM D1922                                               |
| Elmendorf Tear Strength, MD        | 16.9 g/micron | 430 g/mil  | ASTM D1922                                               |
| Elmendorf Tear Strength, TD        | 22.4 g/micron | 570 g/mil  | ASTM D1922                                               |
| Dart Drop Test                     | 530 g         | 1.17 lb    | Method B; ASTM D1709                                     |
| Film Tensile Strength at Break, MD | 65.23 MPa     | 9461 psi   | ASTM D882                                                |

| Film Tensile Strength at Break, TD<br>Mechanical Properties | 65.07 MPa<br>Metric | 9437 psi<br>English | ASTM D882<br>Comments                                                                                      |
|-------------------------------------------------------------|---------------------|---------------------|------------------------------------------------------------------------------------------------------------|
| Heat Seal Strength Initiation<br>Temperature                | 85.0 °C             | 185 °F              | 2 lb/in heat seal strength; 0.5 sec<br>dwell, 40 psi bar pressure, pull speed<br>10 (in./min.); Dow Method |

| Thermal Properties    | Metric  | English | Comments         |
|-----------------------|---------|---------|------------------|
| Melting Point         | 121 °C  | 250 °F  | Dow Method (DSC) |
| Vicat Softening Point | 98.0 °C | 208 °F  | ASTM D1525       |

| Optical Properties | Metric | English | Comments        |
|--------------------|--------|---------|-----------------|
| Haze               | 6.0 %  | 6.0 %   | ASTM D1003      |
| Gloss              | 81 %   | 81 %    | 45°; ASTM D2457 |

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China