

## Styron Magnum® 3513 Acrylonitrile Butadiene Styrene (ABS)

Category : Polymer , Thermoplastic , ABS Polymer

### Material Notes:

MAGNUM® 3513 is a grade which combines high impact with good flowability. It is suitable for injection molding and extrusion applications. Information provided by Dow This product line was spun off from Dow Chemical to Styron in 2010.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Styron-Magnum-3513-Acrylonitrile-Butadiene-Styrene-ABS.php](http://www.lookpolymers.com/polymer_Styron-Magnum-3513-Acrylonitrile-Butadiene-Styrene-ABS.php)

| Physical Properties   | Metric                               | English                              | Comments  |
|-----------------------|--------------------------------------|--------------------------------------|-----------|
| Bulk Density          | 0.650 g/cc                           | 0.0235 lb/in <sup>3</sup>            | ISO 60    |
| Density               | 1.05 g/cc                            | 0.0379 lb/in <sup>3</sup>            | ISO 1183B |
| Linear Mold Shrinkage | 0.0040 - 0.0070 cm/cm                | 0.0040 - 0.0070 in/in                | ISO 294   |
| Melt Flow             | 9.03 g/10 min                        | 9.03 g/10 min                        | ISO 1133  |
|                       | 8.5 g/10 min                         | 8.5 g/10 min                         | ISO 1133  |
|                       | @Load 10.0 kg,<br>Temperature 220 °C | @Load 22.0 lb,<br>Temperature 428 °F |           |

| Mechanical Properties      | Metric                   | English                    | Comments                       |
|----------------------------|--------------------------|----------------------------|--------------------------------|
| Tensile Strength, Yield    | 46.0 MPa                 | 6670 psi                   | 50mm/min; ISO 527-2            |
| Elongation at Yield        | 2.3 %                    | 2.3 %                      | 50mm/min; ISO 527-2            |
| Tensile Modulus            | 2.36 GPa                 | 342 ksi                    | ISO 527-2                      |
| Flexural Strength          | 70.0 MPa                 | 10200 psi                  | 3 points and 2 mm/min; ISO 178 |
| Flexural Modulus           | 2.20 GPa                 | 319 ksi                    | 3 points and 2 mm/min; ISO 178 |
| Izod Impact, Notched (ISO) | 11.0 kJ/m <sup>2</sup>   | 5.23 ft-lb/in <sup>2</sup> | ISO 180/A                      |
|                            | @Temperature -30.0<br>°C | @Temperature -22.0<br>°F   |                                |
|                            | 23.0 kJ/m <sup>2</sup>   | 10.9 ft-lb/in <sup>2</sup> | ISO 180/A                      |
|                            | @Temperature 23.0<br>°C  | @Temperature 73.4 °F       |                                |
| Charpy Impact, Notched     | 0.800 J/cm <sup>2</sup>  | 3.81 ft-lb/in <sup>2</sup> | ISO 179/2C (1984)              |
|                            | @Temperature -30.0<br>°C | @Temperature -22.0<br>°F   |                                |
|                            | 1.10 J/cm <sup>2</sup>   | 5.24 ft-lb/in <sup>2</sup> | ISO 179-1/1eA                  |
|                            | @Temperature -30.0       | @Temperature -22.0         |                                |

| Mechanical Properties | <sup>°C</sup><br>Metric | <sup>°F</sup><br>English   | Comments          |
|-----------------------|-------------------------|----------------------------|-------------------|
|                       | 1.50 J/cm <sup>2</sup>  | 7.14 ft-lb/in <sup>2</sup> | ISO 179/2C (1984) |
|                       | @Temperature 23.0<br>°C | @Temperature 73.4 °F       |                   |
|                       | 2.40 J/cm <sup>2</sup>  | 11.4 ft-lb/in <sup>2</sup> | ISO 179-1/1eA     |
|                       | @Temperature 23.0<br>°C | @Temperature 73.4 °F       |                   |

| Thermal Properties                             | Metric             | English              | Comments                                            |
|------------------------------------------------|--------------------|----------------------|-----------------------------------------------------|
| Deflection Temperature at 1.8 MPa<br>(264 psi) | 100 °C             | 212 °F               | annealed; ISO 75-A                                  |
| Vicat Softening Point                          | 100.5 °C           | 212.9 °F             | 50°C/hr, 50N; ISO 306-B50                           |
| Flammability, UL94                             | HB                 | HB                   |                                                     |
|                                                | @Thickness 1.50 mm | @Thickness 0.0591 in |                                                     |
|                                                | HB                 | HB                   |                                                     |
|                                                | @Thickness 3.00 mm | @Thickness 0.118 in  |                                                     |
| Flame Spread                                   | 45 mm/min          | 1.8 in/min           | Horizontal Burning Speed 2mm<br>thickness; ISO 3795 |

## 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