

## DuPont™ Surlyn® 9650 Ionomer Resin, Zinc

Category : Polymer , Thermoplastic , Ionomer , Ionomer, Molded

### Material Notes:

Surlyn® 9650 thermoplastic resin is an advanced ethylene/methacrylic acid (E/MAA) copolymer, in which the MAA acid groups have been partially neutralized with zinc ions. The amount of MAA and neutralization levels for this grade are optimized to deliver the toughness of other grades, but with improved injection molding processability. Data provided by the manufacturer.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_DuPont-Surlyn-9650-Ionomer-Resin-Zinc.php](http://www.lookpolymers.com/polymer_DuPont-Surlyn-9650-Ionomer-Resin-Zinc.php)

| Physical Properties | Metric   | English  | Comments                |
|---------------------|--|--|-------------------------|
| Density             | 0.950 g/cc   | 0.0343 lb/in <sup>3</sup>                            | ASTM D792               |
| Melt Flow           | 5.0 g/10 min<br>@Load 2.16 kg,<br>Temperature 190 °C | 5.0 g/10 min<br>@Load 4.76 lb,<br>Temperature 374 °F | condition E; ASTM D1238 |

| Mechanical Properties      | Metric                | English                   | Comments                         |
|----------------------------|-----------------------|---------------------------|----------------------------------|
| Hardness, Shore D          | 63                    | 63                        | ASTM D2240                       |
| Tensile Strength, Ultimate | 22.1 MPa              | 3210 psi                  | ASTM D638                        |
| Tensile Strength, Yield    | 12.4 MPa              | 1800 psi                  | 50 mm/min cross speed; ASTM D638 |
| Elongation at Break        | 410 %                 | 410 %                     | ASTM D638                        |
| Flexural Modulus           | 0.220 GPa             | 31.9 ksi                  | ASTM D790                        |
| Izod Impact, Notched       | 7.75 J/cm             | 14.5 ft-lb/in             | ASTM D256                        |
| Tensile Impact Strength    | 970 kJ/m <sup>2</sup> | 462 ft-lb/in <sup>2</sup> | ASTM D1822S                      |
| Abrasion                   | 270                   | 270                       | NBS Index; ASTM D1630            |

| Thermal Properties                          | Metric   | English   | Comments              |
|---|--|---|-----------------------|
| CTE, linear                                 | 150 µm/m-°C<br>@Temperature -20.0 -<br>32.0 °C | 83.3 µin/in-°F<br>@Temperature -4.00 -<br>89.6 °F | ASTM D696             |
| Thermal Conductivity                        | 0.246 W/m-K                                    | 1.71 BTU-in/hr-ft <sup>2</sup> -°F                |                       |
| Melting Point                               | 92.0 °C  | 198 °F  | DTA                   |
| Deflection Temperature at 0.46 MPa (66 psi) | 48.0 °C  | 118 °F  | ASTM D648             |
| Vicat Softening Point                       | 71.0 °C  | 160 °F  | Rate B, ASTM D1525-70 |

| Thermal Properties | Metric      | English      | Comments  |
|--------------------|-------------|--------------|-----------|
| Flame Spread       | 22.9 mm/min | 0.902 in/min | ASTM D635 |

| Optical Properties | Metric                     | English                     | Comments    |
|--------------------|----------------------------|-----------------------------|-------------|
| Haze               | 27 %<br>@Thickness 6.40 mm | 27 %<br>@Thickness 0.252 in | ASTM D1003A |

## 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