

## Solvay Specialty Polymers Veradel® 3300 PREM Polyethersulfone (PESU) (Unverified Data\*\*)

Category : Polymer , Thermoplastic , Polyethersulfone (PES)

### Material Notes:

Veradel® PESU was formerly marketed as Gafone™ PESU Veradel polyethersulfone (PESU) is transparent and offers high heat deflection temperatures, excellent toughness and dimensional stability, and resistance to steam, boiling water, and mineral acids. Other desirable properties include thermal stability, creep resistance, and inherent flame resistance. Veradel 3200 is FDA compliant and therefore approved for direct food contact. Veradel 3200 is a low melt flow grade that can be processed by extrusion or injection molding. Veradel 3300 is a medium melt flow grade suggested for general purpose injection molding. Veradel 3400 is a high melt flow grade designed for easy molding of parts with thin walls or long flow lengths. Information provided by Solvay Specialty Polymers.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Solvay-Specialty-Polymers-Veradel-3300-PREM-Polyethersulfone-PESU-nbspUnverified-Data.php](http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Veradel-3300-PREM-Polyethersulfone-PESU-nbspUnverified-Data.php)

| Physical Properties         | Metric                               | English                              | Comments           |
|-----------------------------|--------------------------------------|--------------------------------------|--------------------|
| Specific Gravity            | 1.37 g/cc                            | 1.37 g/cc                            | ASTM D792          |
| Water Absorption            | 1.9 %                                | 1.9 %                                | 30 days; ASTM D570 |
|                             | 0.50 %                               | 0.50 %                               | ASTM D570          |
|                             | @Time 86400 sec                      | @Time 24.0 hour                      |                    |
| Linear Mold Shrinkage, Flow | 0.0060 cm/cm                         | 0.0060 in/in                         | ASTM D955          |
| Melt Flow                   | 30 g/10 min                          | 30 g/10 min                          | ASTM D1238         |
|                             | @Load 2.16 kg,<br>Temperature 380 °C | @Load 4.76 lb,<br>Temperature 716 °F |                    |

| Mechanical Properties | Metric     | English        | Comments  |
|-----------------------|------------|----------------|-----------|
| Tensile Strength      | 88.9 MPa   | 12900 psi      | ASTM D638 |
| Elongation at Yield   | 6.5 %      | 6.5 %          | ASTM D638 |
| Tensile Modulus       | 2.69 GPa   | 390 ksi        | ASTM D638 |
| Flexural Strength     | 125 MPa    | 18100 psi      | ASTM D790 |
| Flexural Modulus      | 2.62 GPa   | 380 ksi        | ASTM D790 |
| Izod Impact, Notched  | 0.530 J/cm | 0.993 ft-lb/in | ASTM D256 |

| Thermal Properties                | Metric       | English        | Comments  |
|-----------------------------------|--------------|----------------|-----------|
| CTE, linear, Parallel to Flow     | 52.0 µm/m-°C | 28.9 µin/in-°F | ASTM D696 |
| Deflection Temperature at 1.8 MPa |              |                |           |

| (264 psi)<br>Thermal Properties | 200 °C<br>Metric              | 392 °F<br>English               | Annealed* ASTM D648<br>Comments |
|---------------------------------|-------------------------------|---------------------------------|---------------------------------|
| Flammability, UL94              | V-0<br><br>@Thickness 1.50 mm | V-0<br><br>@Thickness 0.0591 in | UL 94                           |

| Optical Properties    | Metric | English | Comments                              |
|-----------------------|--------|---------|---------------------------------------|
| Transmission, Visible | 90 %   | 90 %    | transparent; thickness not quantified |

| Electrical Properties | Metric                | English               | Comments  |
|-----------------------|-----------------------|-----------------------|-----------|
| Volume Resistivity    | 1.70e+15 ohm-cm       | 1.70e+15 ohm-cm       | ASTM D257 |
| Dielectric Constant   | 3.5                   | 3.5                   | ASTM D150 |
|                       | @Frequency 1000 Hz    | @Frequency 1000 Hz    |           |
|                       | 3.51                  | 3.51                  |           |
| Dielectric Strength   | @Frequency 60.0 Hz    | @Frequency 60.0 Hz    | ASTM D150 |
|                       | 3.54                  | 3.54                  | ASTM D150 |
|                       | @Frequency 1.00e+6 Hz | @Frequency 1.00e+6 Hz |           |
| Dissipation Factor    | 15.0 kV/mm            | 381 kV/in             | ASTM D149 |
| Dissipation Factor    | 0.0017                | 0.0017                | ASTM D150 |
|                       | @Frequency 60.0 Hz    | @Frequency 60.0 Hz    |           |
|                       | 0.0022                | 0.0022                |           |
| Dissipation Factor    | @Frequency 1000 Hz    | @Frequency 1000 Hz    | ASTM D150 |
|                       | 0.0056                | 0.0056                | ASTM D150 |
|                       | @Frequency 1.00e+6 Hz | @Frequency 1.00e+6 Hz |           |

| Processing Properties | Metric       | English      | Comments |
|-----------------------|--------------|--------------|----------|
| Melt Temperature      | 343 - 385 °C | 649 - 725 °F |          |
| Mold Temperature      | 149 - 163 °C | 300 - 325 °F |          |
| Drying Temperature    | 177 °C       | 351 °F       |          |
| Dry Time              | 2.50 hour    | 2.50 hour    |          |

| Descriptive Properties | Value                       | Comments |
|------------------------|-----------------------------|----------|
| Appearance             | Transparent - Slight Yellow |          |

| Availability<br>Descriptive Properties | Africa & Middle East<br>Value | Comments |
|----------------------------------------|-------------------------------|----------|
|                                        | Asia Pacific                  |          |
|                                        | Europe                        |          |
|                                        | North America                 |          |
|                                        | South America                 |          |
| Features                               | Acid Resistant                |          |
|                                        | Flame Retardant               |          |
|                                        | General Purpose               |          |
|                                        | Good Adhesion                 |          |
|                                        | Good Chemical Resistance      |          |
|                                        | Good Creep Resistance         |          |
|                                        | Good Dimensional Stability    |          |
|                                        | Good Thermal Stability        |          |
|                                        | Good Toughness                |          |
|                                        | High Heat Resistance          |          |
|                                        | High Tensile Strength         |          |
|                                        | Hydrolysis Resistant          |          |
|                                        | Medium Flow                   |          |
|                                        | Medium Molecular Weight       |          |
| Forms                                  | Pellets                       |          |
|                                        |                               |          |
|                                        |                               |          |
|                                        |                               |          |
| Generic                                | PESU                          |          |
| Injection Rate                         | Fast                          |          |
| Processing Method                      | Injection Molding             |          |
| RoHS Compliance                        | RoHS Compliant                |          |
| Screw Compression Ratio                | 2.0:1.0                       |          |
| Uses                                   | Food Service Applications     |          |
|                                        | General Purpose               |          |

| Descriptive Properties | Value | Comments |
|------------------------|-------|----------|
|------------------------|-------|----------|

**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