



# Veradel<sup>®</sup> 3000P, 3100P, 3200P, 3400P, 3600P

## polyethersulfone

*Veradel<sup>®</sup> PESU was formerly marketed as Gafone<sup>™</sup> PESU*

Veradel 3000P, 3100P, 3200P, 3400P, and 3600P are polyethersulfone (PESU) powders for dissolving or dispersing into solutions. They can also be ground to smaller particle size, or blended with other solid particles.

PESU offers excellent toughness and outstanding hydrolytic resistance. It resists attack from steam, boiling water, and mineral acids. Cast films or coatings of PESU are transparent and have additional desirable proper-

ties including long term thermal stability, excellent metal adhesion and formability, and inherent flame resistance.

A range of molecular weights are available, from 3000P which is the highest to 3600P, the lowest. There is a direct correlation between molecular weight and solution viscosity.

Typical applications include high-temperature coating formulations, membranes, advanced high-temperature composites, and specialty adhesives.

### Typical Properties<sup>(1)</sup>

Property	Test Method	US Customary Units	SI Units
<b>GENERAL</b>			
Solution Viscosity (25% in DMAC <sup>(2)</sup> at 40°C)	Solvay		
3000P		1,450 cP	1,450 cP
3100P		800 cP	800 cP
3200P		485 cP	485 cP
3400P		370 cP	370 cP
3600P		275 cP	275 cP
Residual Solvent	Solvay	0.5 %	0.5 %
Specific Gravity	D 792	1.37	1.37
Water Absorption, 24 hours	D 570	0.6 %	0.6 %
<b>THERMAL</b>			
Glass Transition Temperature	E 1356	428 °F	220 °C
Coefficient of Linear Thermal Expansion	D 696	27 ppm/°F	49 ppm/°C

<sup>(1)</sup> Property values for individual batches will vary within specification limits.

<sup>(2)</sup> DMAC = Dimethylacetamide

### Drying

PESU powders will usually not need to be dried prior to use in coatings, adhesives, and advanced composite matrix applications. If you want to dry the material, contact your Solvay Advanced Polymers representative or our website at [www.solvayadvancedpolymers.com](http://www.solvayadvancedpolymers.com) for instructions.

### Solution Processing

The Solvay Technical Bulletin “*Solution Processing Guide for Polymer Membranes*”, which is available from your Solvay Representative or the Solvay Membranes website at [www.solvaymembranes.com](http://www.solvaymembranes.com), gives basic information on solvents and PESU solution preparation.

### Injection Molding

PESU powders are not intended for injection molding. If injection molding is desired, contact your Solvay representative for pelletized Veradel PESU resins.

### Standard Packaging and Labeling

PESU powdered resins are packaged in bags containing 10 kg (22.046 pounds) of material. Individual packages will be plainly marked with the product number, color, lot number, and net weight.

For assistance with an emergency involving products of Solvay Advanced Polymers, such as a spill, leak, fire, or explosion, call day or night:

### Emergency Health Information

**USA** +1.800.621.4590

**International** +1.770.772.8577

### Emergency Spill Information

**USA** +1.800.424.9300 / +1.703.527.3887 (CHEMTREC)

**Europe** +44 208.762.8322 (CARECHEM)

**China** +86.10.5100.3039

**All other Asian countries** +65.633.44.177

For additional product information, technical assistance, and Material Safety Data Sheets (MSDS), call:

**USA** +1.800.621.4557 / +1.770.772.8760

**Europe** +49.211.5135.9000

**Japan** +81.3.5425.4300

**China & Southeast Asia** +86.21.5080.5080

### World Headquarters

Solvay Advanced Polymers, LLC  
4500 McGinnis Ferry Road  
Alpharetta, Georgia 30005 USA  
Phone: +1.800.621.4557 (USA Only)  
+1.770.772.8760

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Material Safety Data Sheets (MSDS) for products of Solvay Advanced Polymers are available upon request from your sales representative or by emailing us at [advancedpolymers@solvay.com](mailto:advancedpolymers@solvay.com). Always consult the appropriate MSDS before using any of our products.

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