

# Veradel® 3600P

## polyethersulfone

Veradel® PESU was formerly marketed as Gafone™ 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. The grades differ by their molecular weights, with 3000P the highest and 3600P the lowest. There is a direct correlation between molecular weight and solution viscosity.

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

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

### General

Material Status	<ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>	
Availability	<ul style="list-style-type: none"> <li>Africa &amp; Middle East</li> <li>Asia Pacific</li> <li>Europe</li> </ul>	<ul style="list-style-type: none"> <li>Latin America</li> <li>North America</li> </ul>
Features	<ul style="list-style-type: none"> <li>Acid Resistant</li> <li>Chemical Resistant</li> <li>Creep Resistant</li> <li>Flame Retardant</li> <li>Food Contact Acceptable</li> <li>Good Adhesion</li> <li>Good Dimensional Stability</li> <li>Good Thermal Stability</li> </ul>	<ul style="list-style-type: none"> <li>Good Toughness</li> <li>High Flow</li> <li>High Heat Resistance</li> <li>High Tensile Strength</li> <li>Hydrolysis Resistant</li> <li>Low Molecular Weight</li> <li>Medium Rigidity</li> </ul>
Uses	<ul style="list-style-type: none"> <li>Adhesives</li> <li>Binder</li> </ul>	<ul style="list-style-type: none"> <li>Coating Applications</li> <li>Compounding</li> </ul>
Agency Ratings	<ul style="list-style-type: none"> <li>NSF STD-51<sup>1</sup></li> </ul>	
RoHS Compliance	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>	
Appearance	<ul style="list-style-type: none"> <li>Transparent - Slight Yellow</li> </ul>	
Forms	<ul style="list-style-type: none"> <li>Granules</li> </ul>	<ul style="list-style-type: none"> <li>Powder</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>Coating</li> <li>Solution Processing</li> </ul>	<ul style="list-style-type: none"> <li>Spraying</li> </ul>

### Physical

	Typical Value	Unit	Test method
Density / Specific Gravity	1.37		ASTM D792
Water Absorption (24 hr)	0.60	%	ASTM D570
Solution Viscosity <sup>2</sup>	275	mPa·s	Internal Method
Residual Solvent	0.50	%	Internal Method

### Thermal

	Typical Value	Unit	Test method
Glass Transition Temperature	220	°C	ASTM E1356
CLTE - Flow	4.9E-5	cm/cm/°C	ASTM D696

# Veradel<sup>®</sup> 3600P

polyethersulfone

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## Notes

Typical properties: these are not to be construed as specifications.

<sup>1</sup> Maximum Temperature of Use: 124°C (356°F)

<sup>2</sup> 25% in dimethylacetamide at 40°C