

Veradel® 3100P

polyethersulfone

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.

This grade was formerly marketed as Gafone™ PESU

General

Material Status	<ul style="list-style-type: none"> Commercial: Active 	
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific Europe 	<ul style="list-style-type: none"> Latin America North America
Features	<ul style="list-style-type: none"> Acid Resistant Chemical Resistant Creep Resistant Flame Retardant Food Contact Acceptable Good Adhesion Good Dimensional Stability Good Thermal Stability 	<ul style="list-style-type: none"> Good Toughness High Heat Resistance High Molecular Weight High Tensile Strength Hydrolysis Resistant Low Flow Medium Rigidity
Uses	<ul style="list-style-type: none"> Adhesives Coating Applications Compounding 	<ul style="list-style-type: none"> Film Membranes
Agency Ratings	<ul style="list-style-type: none"> NSF STD-61¹ 	
RoHS Compliance	<ul style="list-style-type: none"> RoHS Compliant 	
Forms	<ul style="list-style-type: none"> Granules 	<ul style="list-style-type: none"> Powder
Processing Method	<ul style="list-style-type: none"> Cast Film Coating 	<ul style="list-style-type: none"> Solution Processing

Physical

	Typical Value	Unit	Test method
Density / Specific Gravity	1.37		ASTM D792
Water Absorption (24 hr)	0.60	%	ASTM D570
Solution Viscosity ²	800	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

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Notes

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

¹ Only products bearing the NSF Mark are Certified.

² 25% in dimethylacetamide at 40°C