PSU Granules

PSU granules provide high?temperature endurance, hydrolysis resistance, and mechanical toughness for membranes, electrical insulation, and chemically resistant components, supporting research in polymer processing, thermal ageing, and high?performance 3D printing feedstocks. **SKU:** 1000002788-group
Product Code: SU34-GL-000110

Material Properties for Polymers

Chemical Resistance

Element	Value
Acids - concentrated	Fair
Acids - dilute	Good
Alcohols	Good
Alkalis	Good
Aromatic hydrocarbons	Fair
Greases and Oils	Good
Halogens	Good
Ketones	Poor

Electrical Properties

Element	Value
Dielectric constant @1kHz	3.14
Dielectric constant @1MHz	3.1
Dissipation factor @ 1kHz	0.0013
Dissipation factor @ 1MHz	0.005
Dielectric strength(kV mm?¹)	17
Volume resistivity(Ohmcm)	5x10¹?

Physical Properties

Element	Value
Flammability	HB
Radiation resistance	Good
Resistance to Ultra-violet	Poor

Element	Value
Limiting oxygen index(%)	30
Water absorption(%)	0.4
Water absorption - equilibrium(%)	0.85
Density(gcm?³)	1.24

Mechanical Properties

Element	Value
Hardness - Rockwell	M91
Elongation at break(%)	50-100
Tensile modulus(GPa)	2.48
Izod impact strength(J m?¹)	69
Tensile strength(MPa)	70

Thermal Properties

Element	Value
Heat-deflection temperature - 1.8MPa(C)	174
Upper working temperature(C)	150-180
Thermal conductivity(W m?¹ K?¹)	0.26
Coefficient of thermal expansion(x10?? K?¹)	56