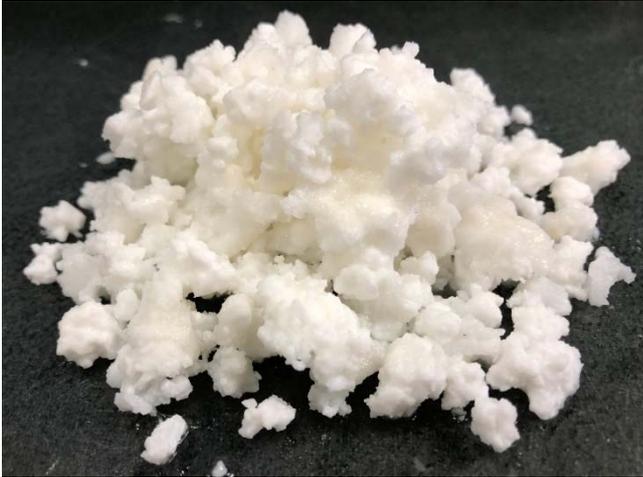


AMORPHOUS PRECIPITATED SILICA

Product Description[†]

Our Amorphous Precipitated Silica (APS) is non-toxic and non-carcinogenic and is produced using a proprietary precipitation process (patent pending) to beneficiate the SiO₂ and remove impurities.



Applications

- Glass Manufacturing:
 - Architectural & Ophthalmic Glass
- Ceramics
- Manufacture of:
 - Silicon Metal (for Solar Panels)
 - Silicon Alloys

Physical and Hydraulic Specification[†]

Appearance	Brilliant White	Total Porosity (%; v/v)	90%
Type	Precipitate	Thermal Conductivity (W/m·K)	0.02
Particle Size	P ₉₅ < 2 μm	Oil Absorption Value (g/100g)	110
Particle Density (g/cm ³)	1.9 – 2.2	Surface Charge Density (meq/g)	
Loose Bulk Density (g/cm ³)	0.2	Reactivity	Non-Swelling
Moisture Content (%)	<4.0		Non-Slaking
Specific Surface Area (BET; m ² /g)	> 150		Non-Plastic

Chemical Specification[†]

pH (1:5 water)	8.5	SiO ₂ (%; Total)	>97
Solubility in Water	Insoluble	Al ₂ O ₃ (%; Total)	1.9
Solubility in Acids	Insoluble	CaO (%; Total)	0.4
Solubility in Alkali	Slightly	Fe ₂ O ₃ (%; Total)	0.2
Cation Exchange Capacity (CEC; meq/100g)	>100	MgO (%; Total)	0.07

[†] Typical analysis specified. Given the heterogeneity of the material the actual properties of the material may differ from those specified in this document. The information contained in this Product Specification Sheet is given in good faith, and may not be interpreted as a binding specification or representation.