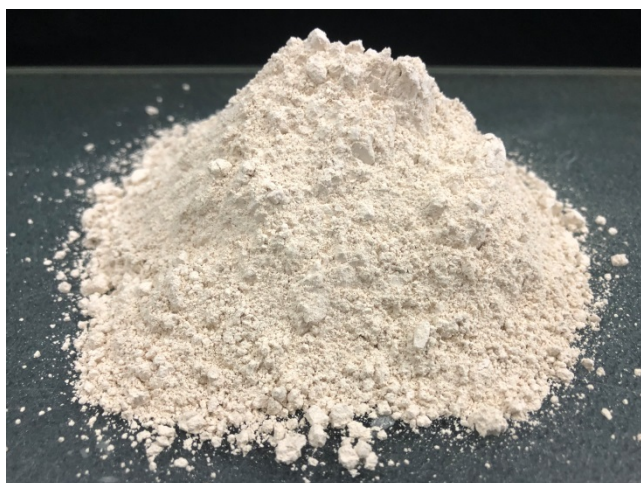


GROUND AMORPHOUS SILICA

Product Description[†]

Our Ground Amorphous Silica is non-toxic and non-carcinogenic and is produced by grinding the Granulated Amorphous Silica product using standard dry milling techniques to produce a low-density powder.



Applications

- Building Products:
 - Supplementary Cementitious Material (SCM)
- Paints and Coatings:
 - Inert filler for paints, primers & topcoats
- Detergents:
 - Inert builder for detergents

Physical and Hydraulic Specification[†]

| | | | |
|--|------------------------|---------------------------------|-------------------|
| Appearance | Off White | Strength Activity Index (SAI;%) | 101 – 103 (7 day) |
| Type | Powder | | 93 – 100 (28 day) |
| Particle Size | P ₉₅ < 75µm | Accelerated SAI (%) | 105 (7 day) |
| Fineness @ 45 µm (% passing) | 75 | Relative Water Requirement (%) | 106 – 108 |
| Particle Density (g/cm ³) | 1.9 – 2.2 | Reactivity | Non-Swelling |
| Loose Bulk Density (g/cm ³) | 0.5 | | Non-Slaking |
| Moisture Content (%) | <4.0 | | Non-Plastic |
| Specific Surface Area (BET; m ² /g) | 30 - 40 | Thermal Conductivity (W/m·K) | 0.14 |
| Total Porosity (%; v/v) | 75% | Oil Absorption Value (g/100g) | 70 – 75 |

Chemical Specification[†]

| | | | |
|--|-----------|---|------|
| pH (1:5 water) | 8.5 | SiO ₂ (%; Total) | 86 |
| Solubility in Water | Insoluble | Al ₂ O ₃ (%; Total) | 7.2 |
| Solubility in Acids | Insoluble | CaO (%; Total) | 1.3 |
| Solubility in Alkali | Slightly | Fe ₂ O ₃ (%; Total) | 0.8 |
| Cation Exchange Capacity (CEC; meq/100g) | >30 | MgO (%; Total) | 0.3 |
| Nitrogen (%; Total) | <0.1 | LOI (%) | 4.7 |
| Phosphorus (%; Total) | <0.2 | Chloride Ion (Cl ⁻ ; %) | 0.5 |
| Sulphur (%; KCl extractable) | <0.1 | Sulfuric Anhydride (SO ₃ ; %) | 0.07 |
| Copper (mg/kg)* | 0.2 | Manganese (mg/kg)* | 4.3 |
| Zinc (mg/kg)* | 1.0 | Boron (mg/kg; Total) | 7 |

* DTPA Extractable.

[†] 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.