



MICRO SILICA – TYPICAL SPECIFICATION

Chemical Properties

Property	Typical Specification
Silicon Dioxide (SiO ₂)	≥ 90%
Aluminum Oxide (Al ₂ O ₃)	≤ 1.0%
Iron Oxide (Fe ₂ O ₃)	≤ 1.5%
Calcium Oxide (CaO)	≤ 1.5%
Magnesium Oxide (MgO)	≤ 1.0%
Sulfur Trioxide (SO ₃)	≤ 1.0%
Alkalis (Na ₂ O + K ₂ O)	≤ 1.5%
Loss on Ignition (LOI)	≤ 6.0%

Physical Properties

Property	Typical Specification
Appearance	Grey to dark grey powder
Form	Amorphous fine powder
Specific Gravity	2.1–2.3
Bulk Density – Undensified	200–350 kg/m ³
Bulk Density – Densified	500–700 kg/m ³
Specific Surface Area	≥ 15 m ² /g
Moisture Content	≤ 3.0%
Oversize Retained on 45 µm Sieve	≤ 10%
Pozzolanic Activity Index	≥ 105%

Standard Compliance

Micro silica for concrete applications may be supplied in accordance with:

- **ASTM C1240** – Standard Specification for Silica Fume Used in Cementitious Mixtures
- **EN 13263** – Silica Fume for Concrete

Note: Values are typical specifications and may vary depending on product grade, production source, and customer requirements. Final values should be confirmed by the supplier's Certificate of Analysis (COA).