



2023 COA Typical Analysis for Silica Fume-Silicon Metal

ASTM C1240-20 Standard Requirements	Limits	Results ¹
Accelerated Pozzolanic Activity Index (%)	>105	121.4
BET Specific Surface (m ² /g)	>15	19.8
Density (specific gravity) (g/cm ³)	-	2.16
Retained on 325 Sieve (+45µm)	<10	2.32
Loss on Ignition, LOI (%)	<6.0	2.6
Moisture (%)	<3.0	0.52
Silicon Dioxide, SiO ₂ (%)	>85	94.81
CSA A3001-18 Standard Requirements	Limits	Results ¹
Retained on 325 Sieve (+45µm)	<10	2.32
Tendency to Entrap Air	No visible foam	No visible foam
Loss on Ignition, LOI (%)	<10	2.6
Sulphur trioxide, SO ₃ (%)	<1.0	0.28
Silicon Dioxide, SiO ₂ (%)	>85	94.81
Physical and Chemical Analysis	Results ¹	
Bulk Density, Undensified (kg/m ³)	165	
Bulk Density, Densified (kg/m ³)	650-750 (range)	
Chloride, Cl ⁻ (%)	0.06	
Moisture (%)	0.52	
pH	7.34	
Total Alkalis as Na ₂ O eq	0.62	

1: Typical results (2023)



The Silica Fume meets the requirements for Silica Fume used in Cementitious Mixtures of ASTM C1240-20, for Cementing Materials, and Blended Supplementary Cementing Materials of CSA – A3001-18 for type SF.

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