



Certificate of Analysis

Silica fume (black)

ASTM C1240-10a Standard Requirements	Limits	Results¹
Acc. Pozzolanic strength Activity index 7 d (%)	>105	-
Specific surface (m ² /g)	>15	-
Density (g/cm ³)	---	-
Oversized retained on 45 µm (%)	<10	-
Loss on ignition, LOI (%)	<6,0	-
Moisture (%)	<3,0	-
Silicon dioxide, SiO ₂ (%)	>85	-
CSA A3001-08 Standard Requirements	Limits	Results¹
Autoclave expansion (%)	<0,2	0,0080
Finesse, retained on 45 µm (%)	<10	0,5
Tendency to entrap air	No visible foam	No visible foam
Loss on ignition, LOI (%)	<10	4,52
Sulphur trioxide, SO ₃ (%)	<1,0	1,23
Silicon dioxide, SiO ₂ (%)	>85	88,4
Physical and Chemical Analysis	Results²	
Bulk density, undensified (kg/m ³)	-	
Bulk density, densified (kg/m ³)	650-750 (range)	
Carbon free, C (%)	-	
Chloride, Cl ⁻ (%)	0,17	
Moisture (%)	0,55	
pH	7,47	
Aluminium oxide, Al ₂ O ₃ (%)	-	
Calcium oxide, CaO (%)	-	
Ferric Oxide, Fe ₂ O ₃ (%)	-	
Magnesium oxide, MgO (%)	-	
Phosphorous pentoxide, P ₂ O ₅ (%)	-	
Potassium oxide, K ₂ O (%)	1,65	
Sodium oxide, Na ₂ O (%)	0,90	

1: Typical results (2013)