

## White Portland Cement - Constituents

Art. ID	NIST-1886b
Unit	5 x 5 g
Deliverydetails	No Dangerous Good /not restricted

### Description

This Standard Reference Material (SRM) is a white portland cement intended primarily for the evaluation of methods for analysis of cements and materials of similar matrix. A unit of NIST-1886b consists of five vials, each containing about 5 g of portland cement ground to pass through a 75 µm (No. 200) sieve, and each sealed in a foil pouch. /// Sample value(s) - please ask for current certificate.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Certified Mass Fraction	SiO <sub>2</sub>		22,08 ± 0,30	%		
Certified Mass Fraction	Al <sub>2</sub> O <sub>3</sub>		3,903 ± 0,043	%		
Certified Mass Fraction	Fe <sub>2</sub> O <sub>3</sub>		0,297 ± 0,016	%		
Certified Mass Fraction	CaO		66,05 ± 0,41	%		
Certified Mass Fraction	MgO	[1309-48-4]	1,526 ± 0,031	%		
Certified Mass Fraction	SO <sub>3</sub>		2,757 ± 0,043	%		
Certified Mass Fraction	Na <sub>2</sub> O		0,01682 ± 0,00084	%		
Certified Mass Fraction	K <sub>2</sub> O		0,0164 ± 0,0048	%		
Certified Mass Fraction	TiO <sub>2</sub>		0,2054 ± 0,0056	%		
Certified Mass Fraction	P <sub>2</sub> O <sub>5</sub>		0,0413 ± 0,0031	%		
Certified Mass Fraction	Mn <sub>2</sub> O <sub>3</sub>		0,02639 ± 0,00047	%		
Certified Mass Fraction	Cr <sub>2</sub> O <sub>3</sub>		0,00404 ± 0,00054	%		
Certified Mass Fraction	SrO		0,0886 ± 0,0034	%		
Certified Mass Fraction	Chloride (Cl-)		0,00399 ± 0,00081	%		
Reference Mass Fraction	ZnO		0,00058 ± 0,00004	%		
Reference Mass Fraction	BaO		0,009 ± 0,005	%		
Reference Mass Fraction	Sulfide sulfur	[n/a]	0,089 ± 0,002	%		
Reference Mass Fraction	Insoluble Residue		0,13 ± 0,02	%		
Reference Mass Fraction	Free CaO		0,24 ± 0,01	%		
Reference Mass Fraction	Fluoride (F-)		0,0118 ± 0,0002	%		
Reference Mass Fraction	Loss on Ignition (LOI) , LOI between 45 °C and 220 °C		0,877 ± 0,085	%		
Reference Mass Fraction	Loss on Ignition (LOI) , LOI between 220 °C an d 550 °C		0,293 ± 0,039	%		
Reference Mass Fraction	Loss on Ignition (LOI)		2,174 ± 0,081	%		

, LOI between 550 °C and  
950 °C

Information Mass Fraction	Loss on Ignition (LOI)	< 0,05	%
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on, LOI between ambient  
temperature and 45 °C

Information Mass Fraction	Mercury (Hg)	[7439-97-6]	< 2	µg/kg
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Information Mass Fraction	Total analyzed constituents	100,24	%
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