

Certificate of Certified Reference Material

NCS DC 62117

White Portland Cement

Reissued in April, 2009

Approved by China National Analysis Center for Iron and Steel

(Beijing China)

Certified Values and Uncertainty

(%)

No.		SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	TiO ₂	CaO	MgO	SO ₃	K ₂ O	Na ₂ O	L.O.I
NCS DC 62117	Certified Value	20.49	4.61	0.26	0.12	65.71	0.14	1.90	0.05	0.05	6.43
	Uncertainty	0.07	0.07	0.01	0.01	0.10	0.02	0.01	0.01	0.01	0.05

Note:

1. Each certified value is the mean of analytical results of 8 independent laboratories.
2. The sample is powder with size less 0.08mm packed in plastic bottle.
The minimum package is 20 grams. The minimum weight for analysis is 0.1g.
3. The sample should be stored in drier after opening.
4. The valid time of the sample is 6 years, although we reserve the right to make change as issue revisions.

Analytical Methods

Composition	Analytical method
SiO ₂	Ammonium chloride gravimetric method; Potassium silicofluoride volumetric method
Al ₂ O ₃	EDTA direct titrimetric method; Titrimetric method
Fe ₂ O ₃	EDTA direct titrimetric method; Potassium dichromate titrimetric method
TiO ₂	Diantipyrylmethane colorimetric method
CaO	EDTA direct titrimetric method; Permanganate photometric method
MgO	Titrimetric method; Atomic absorption spectrometric method
SO ₃	Gravimetric method; Iodimetric method
K ₂ O	Atomic absorption spectrometric method; Flame photometric method
Na ₂ O	Atomic absorption spectrometric method; Flame photometric method
L.O.I	Gravimetric method



Professor Wang Haizhou, Chief

China National Analysis Center for Iron and Steel