

Certificate of Certified Reference Material

NCS DC 62114

Pozzolana in Cement Industry

Reissued in 2014

Approved by China National Analysis Center for Iron and Steel

( Beijing China )

This Certified Reference Materials is prepared in accordance with the ISO guides 30-35. The intended use for this CRM is for the quality control component analysis of pozzolana in cement industry, the evaluating methods of analysis and the calibration of analytical instruments.

### Certified Values and Uncertainty

(%)

No.		SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	CaO	MgO	SO <sub>3</sub>	K <sub>2</sub> O	Na <sub>2</sub> O	L.O.I
NCS DC	Certified Value	57.53	24.20	5.10	1.07	2.83	1.24	0.08	3.05	1.42	2.99
62114	Uncertainty	0.09	0.07	0.06	0.02	0.03	0.04	0.01	0.08	0.06	0.05

Note:

1. 7 independent laboratories take part in the analysis work.
2. The sample is powder with size less 0.08mm packed in plastic bottle. The minimum package is 20 grams.
3. The sample should be stored at 105-110 °C for 2 hours before use.
4. The sample should be stored in drier after opening.
5. The valid time of the sample is 5 years, although we reserve the right to make change as issue revisions.

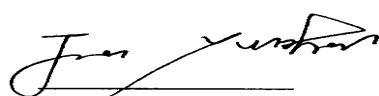
### Analytical Methods

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

### Statement:

This material is used only in labs and for analysis work, producer will be not responsible for any problem caused by misuse or not properly store.

Please check carefully the package, quantity and type of the material after receiving it. Related compensation is only limited in the certified materials, any other losses will be not included.



**Jia Yunhai**

**Laboratory Director**