

Certificate of Certified Reference Material

NCS HC 15014

Pure Iron

Reissued in 2011

Approved by China National Analysis Center for Iron and Steel

(Beijing China)

Certified Values and Standard Deviation

(%)

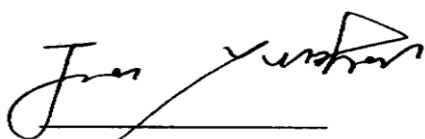
No.		C	S	Si	P	Mn	Cr	Ni	Cu
NCS HC	Certified Value	0.0208	0.007	0.0922	0.0121	0.246	0.013	0.0202	0.020
15014	Standard Deviation	0.0020	0.001	0.0030	0.0010	0.005	0.003	0.0015	0.001
		Al	As	Pb	Sn	Sb			
NCS HC	Certified Value	0.46	0.0022	0.000085	0.0012	0.00050			
15014	Standard Deviation	0.02	0.0004	0.000007	0.0003	0.00007			

Note:

1. 8 independent laboratories take part in the analysis work.
2. The sample is chip with size 0.180-0.900mm packed in glass bottle.
Each bottle contains 100 grams. The sample should be stored at dry place.
3. The valid time of the sample is 15 years. although we reserve the right to make change as issue revisions.

Analytical Methods

C	Infrared absorption method; Combustion-gasometric method
S	Infrared absorption method; Alumina chromatographic separation-barium sulfate gravimetric method
Mn	Potassium periodate oxidation photometric method; AAS
Si	Silicon-molibdenum blue photometric method; Gravimetric method after dehydration by perchloric acid
P	Butyl acetate extraction photometric method; N-butyl alcohol-chloroform extraction molybdenum blue photometric method
Cr	MIBK extraction-diphenylcarbazide spectrophotometric method; ICP-AES;
Ni	The dimethylglyoxime-trichloromethane extraction photometric method; AAS
Cu	Photometric method with Bis-cyclohexanone oxalylbihydrazone; AAS Neocuproine extraction photometric method
Al	Chromazurol S photometric method; ICP-AES; Cupferron separation-chrome azurol S photometric method
As	Distillation separation—arsenic-molybdenum blue photometric method; AAS
Sb	Malachite green photometric method; AAS
Sn	Phenylfluorone photometric method after extraction with iodide; AAS
Pb	ICP-AES with diethyl ether extraction; ICP-AES; Photometric method; AAS



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Laboratory Director

