

101.12 - Steelmaking Alloys (powder form)

These SRMs are intended for checking chemical methods of analysis for major constituents and selected minor elements. They are furnished as fine powders (usually <0.1 mm).

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	57b	58a	59a	64c	68c	90	195	196
Description	Silicon Metal	Ferrosilicon (73% Si Regular Grade)	Ferrosilicon Grade E1 (powder form)	Ferrochromium High Carbon (powder form)	Standard Ferromanganese (powder form)	Ferrophosphorus (powder form)	Ferrosilicon (75% Si-High-Purity Grade)	Ferrochromium Low Carbon (powder form)
Unit of Issue	(40 g)	(75 g)	(50 g)	(100 g)	(100 g)	(75 g)	(75 g)	(100 g)

Elemental Composition (mass fraction in %)

Aluminum (Al)	0.1690	0.953	0.354	(0.006)			0.0460	
Arsenic (As)		(0.002)		(0.003)	0.0212			
Bismuth (Bi)								
Boron (B)	0.001443	(<0.003)	0.0578				0.00105	
Calcium (Ca)	0.00222	0.271	0.0418				0.054	
Carbon (C)		0.0143	0.0458	4.698	6.721		0.03445	0.0351
Chromium (Cr)	0.00173	0.0193	0.0805	68.00	0.0744		0.0474	70.81
Cobalt (Co)	0.0015	(<0.03)		0.0515	(0.18)		(<0.01)	
Copper (Cu)	0.00172	0.0225	0.0520	0.0053			0.0468	
Iron (Fe)	0.3400	25.239	50.05	24.99	12.30		23.62	
Lead (Pb)								
Manganese (Mn)	0.00782	0.1611	0.754	0.1624	80.04		0.1710	(0.28)
Molybdenum (Mo)		(<0.01)		(<0.001)			(0.01)	
Nickel (Ni)	0.00153	0.0124	0.0328	0.429	(0.12)		0.0318	0.36
Nitrogen (N)				0.0449				

Elemental Composition (mass fraction in %)

Oxygen (O)	(0.4)	(0.25)		(0.12)	(0.11)		(<1)	
Phosphorus (P)	0.00163	0.0105	0.0158	0.0193	0.192	26.17	0.0190	0.0195
Silicon (Si)		73.13	48.10	1.216	0.2250		75.32	0.373
Sulfur (S)	(0.003)	(<0.002)	(0.002)	0.0673	(0.008)		(<0.002)	0.003
Tin (Sn)		(<0.005)		(<0.0005)			(<0.005)	
Titanium (Ti)	0.0346	0.0510		0.0179			0.0367	
Vanadium (V)	0.0025	(0.002)		0.1528				(0.12)
Zirconium (Zr)	0.00178	(<0.005)					0.0110	

- Certified values are normal font
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- Values in parentheses are for information only

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**Ferrochromium
Silicon
(100 g)**

0.049

(0.009)

(<0.003)

0.0017

0.043

36.4

0.034

0.013

23.2

(0.004)

0.32

0.20

(0.002)

(0.06)

0.026

39.5

0.002

0.40

0.09

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