

101.6 - Stainless Steels (chip and powder forms)

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	101g	123c	133b	160b	166c	339	893	895
Description	18 Cr-10 Ni Steel (AISI 304L) (powder form)	Stainless Steel, Cr-Ni-Nb (AISI 348)	Chromium-Molybdenum Steel	Stainless Steel (Cr 18-Ni 12-Mo 2) (AISI 316)	Low-Carbon Stainless Steel (AISI 316L) (chip form)	17 Chromium-9 Nickel-0.2 Selenium Steel	Stainless Steel (SAE 405)	Stainless Steel (SAE 201)
Unit of Issue	(100 g)	(150 g)	(150 g)	(150 g)	(100 g)	(150 g)	(150 g)	(150 g)

Elemental Composition (mass fraction in %)

Aluminum (Al)							(0.20)	
Arsenic (As)				<i>0.01067</i>				
Bismuth (Bi)				(<0.0005)				
Boron (B)								
Carbon (C)	0.0136	0.056	0.128	0.0445	0.00781	0.052	0.027	0.066
Chromium (Cr)	18.46	17.40	12.63	18.37		17.42	13.55	16.72
Cobalt (Co)	0.09	0.12		0.1052		0.096	0.020	0.126
Copper (Cu)	0.029	0.103	0.080	0.1734		0.199	0.261	0.439
Lead (Pb)				(0.001)			(0.0001)	(0.0001)
Manganese (Mn)	0.085	1.75	1.07	1.619		0.738	0.378	7.09
Molybdenum (Mo)	0.004	0.22	0.052	2.386		0.248	0.023	0.337
Nickel (Ni)	10.00	11.34	0.230	12.35		8.89	0.192	5.34
Niobium (Nb)		0.65					(<0.0005)	(<0.009)
Nitrogen (N)			(0.05)	(0.04)				
Phosphorus (P)	0.007	0.024	0.018	<i>0.0200</i>		0.129	0.022	0.038

Elemental Composition (mass fraction in %)

Selenium (Se)						0.247	(<0.0001)	(<0.0001)
Silicon (Si)	1.08	0.59	0.327	<i>0.5093</i>		0.654	0.326	0.399
Sulfur (S)	0.0078	0.014	0.328	0.0175		0.013	0.0003	0.0033
Tantalum (Ta)		<0.001					(<0.001)	(<0.001)
Titanium (Ti)							(0.01)	(<0.0004)

- Certified values are normal font
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Tungsten (W)			<i>(0.11)</i>			<i>(0.03)</i>
Vanadium (V)	0.041	0.071	0.0508	0.058	0.080	0.079

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