

102.4 - Copper Base Alloys (block and disk forms)

The SRMs with a "C" prefix are chill-cast blocks, the others are wrought disks. Both forms have nearly identical elemental compositions.

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.

Description >>	1107 Naval Brass UNS 46400	1115 Commercial Bronze Standard for Optical Emission and X-ray Spectroscopic Analysis	1124 Free Cutting Brass (UNS C36000)	C1251a Phosphorus Deoxidized Copper -Cu VIII	C1252a Phosphorus Deoxidized Copper -Cu IX	C1253a Phosphorus Deoxidized Copper - Cu X	1276a Cupro-Nickel (CDA 715)
Unit of Issue >>	disk	disk	1 disk	block	block	block	disk

Concentration are expressed as mass fraction, in % (unless noted by an asterisk * for mg/kg).

Aluminum	0.083			<20	<20	176	
Antimony			232.5*	14.9	42	139	0.0004
Arsenic				16	118	436	
Bismuth			202*	3.7	(19)	(56)	
Cadmium			65.1*	<3	16.9	70	0.0002
Chromium			155*	(3)	19	260	
Cobalt			(14*)	13.2	87	454	0.045
Copper	61.183	87.96	(62.5*)	99.89*	99.87*	99.46*	67.8
Gold				15.5	33.9	72	
Iron	0.0389	0.13	0.2068	285	72	290	0.56
Lead	0.1850	0.013	3.363	23.5	60	243	0.004
Magnesium				<20	<20	(150)	0.12
Manganese			(9*)	4.6	43	357	1.01
Nickel	0.0946	0.074	0.0801	23.6	128	491	30.5
Phosphorus		0.05	224*	420	125	561	0.006
Selenium				11	56	136	0.005
Silicon				<50	<100	(580)	
Silver			131*	80	158	494	
Sulfur			31*	(35)	(70)	(50)	
Tellurium				16	54.6	168	
Tin	1.066	0.10	0.3112	16	120	499	0.023
Zinc	37.396	11.73	35.19	24	69.4	329	0.038

- Certified values are normal font.

- Non-certified and reference values are italicized.

- Information values and values of potential interest are within parentheses.