

102.3 - Copper Base Alloys (chip, granule and rod 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.

Description >>	158a Silicon Bronze (chip form)	458 Beryllium-Copper (17510)	459 Beryllium-Copper (17200)	460 Beryllium-Copper Alloy	871 Phosphor Bronze (CDA 521)	872 Phosphor Bronze (CDA 544)	874 Cupro-Nickel, 10% (CDA 706) "HIGH-PURITY"	875 Cupro-Nickel, 10% (CDA 706) "DOPED"	880 Nickel Silver (CDA 770) (granular form)	1034 Unalloyed Copper rod	1035 Leaded-Tin Bronze Alloy
Unit of Issue >>	150 g	50 g	50 g	50 g	100 g	100 g	100 g	100 g	100 g		50 g
Concentration are expressed as mass fraction, in % (unless noted by an asterisk * for mg/kg).											
Aluminum	0.4580	0.030	0.044	0.048							(<i><2</i>)*
Antimony		(<i><0.005</i>)	(<i><0.005</i>)	(<i><0.005</i>)			<i>< 0.001</i>	<i>< 0.001</i>			(<i>0.2</i>)*
Arsenic							(<i><0.0006</i>)	(<i>0.0010</i>)			(<i>0.2</i>)*
Beryllium		0.360	1.82	1.86							
Bismuth							<i><0.0002</i>	0.003			(<i>0.2</i>)*
Cadmium							<i><0.0002</i>	0.0022			(<i><1</i>)*
Carbon							(<i>0.0023</i>)	(<i>0.0035</i>)			
Chromium	(<i>0.001</i>)	0.004	0.005	0.005							(<i>0.3</i>)*
Cobalt		0.076	0.221	0.217							(<i>0.2</i>)*
Copper	90.93	(<i>97.9</i>)	(<i>97.7</i>)	(<i>97.5</i>)	91.68	87.36	88.49	87.83	54.51	(<i>99.96</i>)	(<i>78.5</i>)
Gold											(<i><0.05</i>)*
Hydrogen							(<i>0.0016</i>)	(<i>0.004</i>)			
Iron	1.228	0.060	0.079	0.098	<i><0.001</i>	0.003	1.22	1.45	0.004	(<i>2.0</i>)*	(<i>0.001</i>)
Lead	0.0973	0.002	0.001	0.258	0.010	4.13	<i><0.0005</i>	0.0092	0.002	(<i>0.5</i>)*	(<i>13.5</i>)
Magnesium		0.003	0.007				(<i>0.0002</i>)	(<i>0.0010</i>)			(<i><1</i>)*
Manganese	1.112	(<i><0.002</i>)	(<i><0.003</i>)	(<i><0.003</i>)			0.0020	<i><0.0007</i>	<i><0.001</i>	(<i>< 0.1</i>)*	
Nickel	(<i>0.001</i>)	1.60	0.039	0.031			10.18	10.42	18.13	(<i>0.6</i>)*	(<i>0.75</i>)
Oxygen							(<i>0.06</i>)	(<i>0.14</i>)		(<i>363</i>)*	(<i>0.64</i>)
Phosphorus	0.0263				0.082	0.26	0.002	0.0020			(<i>0.004</i>)
Selenium							0.00015	0.0004			(<i>3.3</i>)*
Silicon	3.026	0.035	0.077	0.77			(<i>0.0006</i>)	(<i>0.0008</i>)			(<i><2</i>)*
Silver	(<i>0.001</i>)	(<i><0.01</i>)	(<i><0.003</i>)	(<i><0.002</i>)							(<i>8.1</i>)*
Sulfur		(<i><0.002</i>)	(<i><0.001</i>)				(<i>0.0011</i>)	(<i>0.0011</i>)			2.8*
Tellurium								(<i><0.0001</i>)			(<i>0.5</i>)*
Tin	0.960	0.004	0.005	0.006	8.14	4.16	0.007	0.009		(<i><0.2</i>)*	(<i>6.8</i>)
Titanium		(<i><0.002</i>)	(<i>< 0.003</i>)				(<i>0.0001</i>)	(<i><0.0002</i>)			
Zinc	2.076	0.002	0.002	0.004	0.025	4.0	0.002	0.11	27.3	(<i><11</i>)*	(<i>0.25</i>)
Zirconium		(<i><0.002</i>)	(<i><0.002</i>)								

- Certified values are normal font
- Non-certified or reference values are italicized
- Non-certified values in parentheses are for information only

All values in % unless otherwise indicated

*Value is in mg/kg.