

Representative results of microchemical (EPMA) analyses (in wt.%) of malachite

	1	2	3	4	5	6	7	8	9	10
SO ₃		2.87	5.25		0.55	2.44		0.23	3.81	0.20
P ₂ O ₅	0.44	0.38	0.18	0.40	0.52	0.17	0.37	0.43	0.46	0.53
SiO ₂	0.39		0.38	0.33		0.35	0.52	0.39	0.30	0.33
CuO	67.72	67.87	67.62	68.52	67.83	68.07	68.26	67.83	67.28	67.40
Σ	68.54	71.11	73.44	69.25	68.90	71.03	69.15	68.88	71.85	68.45
H ₂ O ²	7.68	7.70	7.67	7.78	7.70	7.72	7.74	7.70	7.63	7.65
CO ₂ ²	17.78	16.87	15.10	18.12	18.00	16.84	17.80	17.68	15.68	17.58
<i>apfu or mpfu (basis: 2 metal atoms)</i>										
S		0.08	0.15		0.02	0.07		0.01	0.11	0.01
P	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.02
Si	0.02		0.02	0.01		0.01	0.02	0.02	0.01	0.01
Cu	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
CO ₃ ³	0.95	0.90	0.81	0.95	0.96	0.89	0.94	0.94	0.84	0.94
OH ³	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

¹⁾ Al, Mg, Ca, Cl, K, V, Ti, Fe, Mn, Zn, and As were analyzed but not detected; empty cells denote values below detection limits; ²⁾ calculated backward from *mpfu*(CO₃²⁻) content; ³⁾ by charge balance and stoichiometry