

M0011244: Table of Atomic weights determined by Berzelius, 19th century

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BERZELIUS'S ATOMIC WEIGHT TABLES

	1	2	3	4	5	6	7	8
Element		1814		1818		1826		
O		16		16		16.03		
S	SO ² , SO ³	32.16	SO ² , SO ³	32.19	SO ² , SO ³	32.24	SO ₂ , SO ₃	
P	P ² O ³ , P ² O ⁵	26.80	PO ³ , PO ⁵	62.77	P ² O ³ , P ² O ⁵	31.43	P ₂ O ₃ , P ₂ O ₅	
Cl		(35.16)		(35.41)	Cl ² O ⁵	35.47		
C	CO, CO ²	11.986	CO, CO ²	12.05	CO, CO ²	12.25	CO, CO ₂	
N		(14.36)		(14.05)	N ² O, NO	14.19	N ₂ O, NO	
H	H ² O	1.062	H ² O	0.9948	H ² O	1	H ² O	
As	AsO ³ , AsO ⁵	134.38	AsO ³ , AsO ⁵	150.52	As ² O ³ , As ² O ⁵	75.33	As ₂ O ₃ , As ₂ O ₅	
Cr	CrO ³ , CrO ⁶	113.29	CrO ³ , CrO ⁶	112.58	Cr ² O ³ , CrO ³	56.38	Cr ₂ O ₃ , CrO ₃	
Si	SiO ³	48.696	SiO ³	47.43	SiO ³	44.44	SiO ₂	
Hg	HgO, HgO ²	405.06	HgO, HgO ²	405.06	Hg ² O, HgO	202.86	Hg ₂ O, HgO	
Ag	AgO ²	430.107	AgO ²	432.51	AgO	216.6	Ag ₂ O	
Cu	CuO, CuO ²	129.03	CuO, CuO ²	126.62	Cu ² O, CuO	63.42	Cu ₂ O, CuO	
Bi	BiO ²	283.84	BiO ²	283.81	Bi ² O ³	213.22	Bi ₂ O ₃	
Pb	PbO ² , PbO ³	415.58	PbO ² , PbO ³	414.24	PbO, Pb ² O ³	207.46	PbO, Pb ₂ O ₃	
Sn	SnO ² , SnO ⁴	235.29	SnO ² , SnO ⁴	235.3	SnO, SnO ²	117.84	SnO, SnO ₂	
Fe	FeO ² , FeO ³	110.98	FeO ² , FeO ³	108.55	FeO, Fe ² O ³	54.36	FeO, Fe ₂ O ₃	
Zn	ZnO ²	129.03	ZnO ²	129.03	ZnO	64.62	ZnO	
Mn	MnO ² , MnO ³	113.85	MnO ² , MnO ³	113.85	MnO, Mn ² O ³	55.43	MnO, Mn ₂ O ₃	
Al	AlO ³	54.88	AlO ³	54.77	Al ² O ³	27.43	Al ₂ O ₃	
Mg	MgO ²	50.47	MgO ²	50.68	MgO	25.38	MgO	
Ca	CaO ²	81.63	CaO ²	81.93	CaO	41.03	CaO	
Na	NaO ²	92.69	NaO ²	93.09	NaO	46.62	Na ₂ O	
K	KO ²	156.48	KO ²	156.77	KO	78.51	K ₂ O	

In this table, columns 2, 4 and 6 give the formulae of the oxides assumed by Berzelius, column 8 the modern formulae of the oxides; columns 3 and 5 give the atomic weights recalculated from Berzelius's values, referred to oxygen = 100, to oxygen = 16; column 7 gives Berzelius's values on his alternative scale of hydrogen = 1.