

**Standard Enthalpy of Formation of the Inorganic Compounds (25°C, 1 atm)**

Species	$\Delta H_f^\circ$ (kJ/mol)	Species	$\Delta H_f^\circ$ (kJ/mol)	Species	$\Delta H_f^\circ$ (kJ/mol)	Species	$\Delta H_f^\circ$ (kJ/mol)
Al(s)	0	HCl(g)	-92.307	MgS(s)	-346	SiC(s)	-65.3
AlCl <sub>3</sub> (s)	-704.2	HCl(aq)	-167.159	Hg(l)	0	SiCl <sub>4</sub> (g)	-657.01
Al <sub>2</sub> O <sub>3</sub> (s)	-1675.7	Cr(s)	0	HgCl <sub>2</sub> (s)	-224.3	SiH <sub>4</sub> (g)	34.3
H <sub>2</sub> CO <sub>3</sub> (aq)	-698.7	Cr <sub>2</sub> O <sub>3</sub> (s)	-1139.7	HgO(s, red)	-90.83	SiF <sub>4</sub> (g)	-1614.94
NH <sub>3</sub> (aq)	-80.29	CrCl <sub>3</sub> (s)	-556.5	HgS(s, red)	-58.2	SiO <sub>2</sub> (s, quartz)	-910.94
BaCl <sub>2</sub> (s)	-858.6	Cu(s)	0	Ni(s)	0	Ag(s)	0
BaCl <sub>2</sub> ·2H <sub>2</sub> O(s)	-1460.1	CuO(s)	-157.3	NiO(s)	-239.7	Ag <sub>2</sub> O(s)	-31.05
BaO(s)	-553.5	CuCl <sub>2</sub> (s)	-220.1	NiCl <sub>2</sub> (s)	-305.332	AgCl(s)	-127.068
Ba(OH) <sub>2</sub> ·8H <sub>2</sub> O(s)	-3342	F <sub>2</sub> (g)	0	N <sub>2</sub> (g)	0	AgNO <sub>3</sub> (s)	-124.39
BaSO <sub>4</sub> (s)	-1473.2	F(g)	78.99	N(g)	472.704	Na(s)	0
Be(s)	0	F <sup>-</sup> (aq)	-332.63	NH <sub>3</sub> (g)	-46.11	Na(g)	107.32
Be(OH) <sub>2</sub> (s)	-902.5	HF(g)	-271.1	N <sub>2</sub> H <sub>4</sub> (l)	50.63	NaBr(s)	-361.062
Br(g)	111.884	HF(aq)	-332.63	NH <sub>4</sub> Cl(s)	-314.43	NaCl(s)	-411.153
Br <sub>2</sub> (l)	0	H <sub>2</sub> (g)	0	NH <sub>4</sub> Cl(aq)	-299.66	NaCl(g)	-176.65
Br <sub>2</sub> (g)	30.907	H(g)	217.965	NH <sub>4</sub> NO <sub>3</sub> (s)	-365.56	NaCl(aq)	-407.27
BrF <sub>3</sub> (g)	-255.6	H <sub>2</sub> O(l)	-285.83	NH <sub>4</sub> NO <sub>3</sub> (aq)	-339.87	NaOH(s)	-425.609
HBr(g)	-36.4	H <sub>2</sub> O(g)	-241.818	NO(g)	90.25	NaOH(aq)	-470.114
Ca(s)	0	H <sub>2</sub> O <sub>2</sub> (l)	-187.78	NO <sub>2</sub> (g)	33.18	Na <sub>2</sub> CO <sub>3</sub> (s)	-1130.68
Ca(g)	178.2	I <sub>2</sub> (s)	0	N <sub>2</sub> O(g)	82.05	S(s, rhombic)	0
CaC <sub>2</sub> (s)	-59.8	I <sub>2</sub> (g)	62.438	N <sub>2</sub> O <sub>4</sub> (g)	9.16	S(g)	278.805
CaCO <sub>3</sub> (s)	-1206.92	I(g)	106.838	NOCl(g)	51.71	S <sub>2</sub> Cl <sub>2</sub> (g)	-18.4
CaCl <sub>2</sub> (s)	-795.8	ICl(g)	17.78	HNO <sub>3</sub> (l)	-174.1	SF <sub>6</sub> (g)	1209
CaF <sub>2</sub> (s)	-1219.6	Fe(s)	0	HNO <sub>3</sub> (g)	-135.06	H <sub>2</sub> S(g)	-20.63
CaH <sub>2</sub> (s)	-186.2	FeO(s)	-272	HNO <sub>3</sub> (aq)	-207.36	SO <sub>2</sub> (g)	-296.83
CaO(s)	-635.09	Fe <sub>2</sub> O <sub>3</sub> (s)	-824.2	O <sub>2</sub> (g)	0	SO <sub>3</sub> (g)	-395.72
CaS(s)	-482.4	Fe <sub>3</sub> O <sub>4</sub> (s)	-1118.4	O(g)	249.17	SOCl <sub>2</sub> (g)	-212.5
Cr(s)	0	FeCl <sub>2</sub> (s)	-341.79	O <sub>3</sub> (g)	142.7	H <sub>2</sub> SO <sub>4</sub> (l)	-813.989
Cr <sub>2</sub> O <sub>3</sub> (s)	-1139.7	FeCl <sub>3</sub> (s)	-399.49	P <sub>4</sub> (s, white)	0	H <sub>2</sub> SO <sub>4</sub> (aq)	-909.27
Ca(OH) <sub>2</sub> (s)	-986.09	FeS <sub>2</sub> (s, pyrite)	-178.2	P <sub>4</sub> (s, red)	-70.4	Sn(s, white)	0
Ca(OH) <sub>2</sub> (aq)	-1002.82	Fe(CO) <sub>5</sub> (l)	-774	P(g)	314.64	Sn(s, gray)	-2.09
CaSO <sub>4</sub> (s)	-1434.11	Pb(s)	0	PH <sub>3</sub> (g)	5.4	SnCl <sub>4</sub> (l)	-511.3
C(s, graphite)	0	PbCl <sub>2</sub> (s)	-359.41	PCl <sub>3</sub> (g)	-287	SnCl <sub>4</sub> (g)	-471.5
C(s, diamond)	1.895	PbO(s, yellow)	-217.32	P <sub>4</sub> O <sub>10</sub> (s)	-2984	SnO <sub>2</sub> (s)	-580.7
C(g)	716.682	PbS(s)	-100.4	H <sub>3</sub> PO <sub>4</sub> (s)	-1279	Ti(s)	0
CO(g)	-110.525	Li(s)	0	K(s)	0	TiCl <sub>4</sub> (l)	-804.2
CO <sub>2</sub> (g)	-393.509	LiOH(s)	-484.93	KCl(s)	-436.747	TiCl <sub>4</sub> (g)	-763.2
CS <sub>2</sub> (g)	117.36	LiOH(aq)	-508.48	KClO <sub>3</sub> (s)	-397.73	TiO <sub>2</sub> (s)	-939.7
CoCl <sub>2</sub> (g)	-218.8	LiCl(s)	-408.701	KI(s)	-327.9	Zn(s)	0
Cs(s)	0	Mg(s)	0	KOH(s)	-424.764	ZnCl <sub>2</sub> (s)	-415.05
CsCl(s)	-443.04	MgCl <sub>2</sub> (g)	-641.32	KOH(aq)	-482.37	ZnO(s)	-348.28
Cl(g)	121.679	MgO(s)	-601.7	Si(s)	0	ZnS(s, sphalerite)	-205.98
Cl <sub>2</sub> (g)	0	Mg(OH) <sub>2</sub> (s)	-924.54	SiBr <sub>4</sub> (l)	-457.3		