

# Molar Enthalpies of Formation, $\Delta H_f^\circ$ , at 298 K

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<u>Formula</u>	<u>Substance Name</u>	<u><math>\Delta H_f^\circ</math> (kJ/mol)</u>
Al <sub>2</sub> O <sub>3</sub> (s)	Aluminum oxide	-1675.7
BaCO <sub>3</sub> (s)	Barium carbonate	-1216.3
CaCO <sub>3</sub> (s)	Calcium carbonate	-1206.9
CaO(s)	Calcium oxide	635.1
CCl <sub>4</sub> (l)	Carbon tetrachloride	-135.4
CH <sub>4</sub> (g)	Methane	-74.8
CH <sub>3</sub> OH(l)	Methanol	-238.7
C <sub>2</sub> H <sub>5</sub> OH(l)	Ethanol	-277.7
CO(g)	Carbon monoxide	-110.5
CO <sub>2</sub> (g)	Carbon dioxide	-393.5
C <sub>2</sub> H <sub>2</sub> (g)	Ethyne (acetylene)	+226.7
C <sub>2</sub> H <sub>4</sub> (g)	Ethene (ethylene)	+52.3
C <sub>2</sub> H <sub>6</sub> (g)	Ethane	-84.7
C <sub>3</sub> H <sub>8</sub> (g)	Propane	-103.8
C <sub>4</sub> H <sub>10</sub> (g)	Butane	-888.0
CuSO <sub>4</sub> (s)	Copper(II) sulfate	-771.4
H <sub>2</sub> O(g)	Water vapor	-241.8
H <sub>2</sub> O(l)	Liquid water	-285.8
HF(g)	Hydrogen fluoride	-271.1
HCl(g)	Hydrogen chloride	-92.3
HBr(g)	Hydrogen bromide	-36.4
HI(g)	Hydrogen iodide	+26.5
KF(s)	Potassium fluoride	-567.3
KCl(s)	Potassium chloride	-436.7
KBr(s)	Potassium bromide	-393.8
MgO(s)	Magnesium oxide	-601.7
MgSO <sub>4</sub> (s)	Magnesium sulfate	-1284.9
Mg(OH) <sub>2</sub> (s)	Magnesium hydroxide	-924.5
NaF(s)	Sodium fluoride	-573.6
NaCl(s)	Sodium chloride	-411.2
NaBr(s)	Sodium bromide	-361.1
NaI(s)	Sodium iodide	-287.8
NH <sub>3</sub> (g)	Ammonia	-46.1
NO(g)	Nitrogen monoxide	+90.3
NO <sub>2</sub> (g)	Nitrogen dioxide	+33.2
PCl <sub>3</sub> (l)	Phosphorus trichloride	-319.7
PCl <sub>5</sub> (s)	Phosphorus pentachloride	-443.5
SiO <sub>2</sub> (s)	Silicon dioxide (quartz)	-910.9
SnCl <sub>2</sub> (s)	Tin(II) chloride	-325.1
SnCl <sub>4</sub> (l)	Tin(IV) chloride	-511.3
SO <sub>2</sub> (g)	Sulfur dioxide	-296.8
SO <sub>3</sub> (g)	Sulfur trioxide	-395.7
H <sub>2</sub> SO <sub>4</sub> (l)	Sulfuric acid	-811.32