

Standard Enthalpies of Formation

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General Chemistry I & II

Substance	ΔH_f° (kJ/mol)	Substance	ΔH_f° (kJ/mol)	Substance	ΔH_f° (kJ/mol)
AgCl(s)	-127.0	CaSO ₄ (s)	-1434.5	NO ₂ (g)	+33.1
Al ₂ O ₃ (s)	-1675.7	Fe ₂ O ₃ (s)	-825.5	N ₂ H ₄ (g)	+95.4
CHCl ₃ (g)	-103.2	HBr(g)	-36.4	N ₂ H ₄ (l)	+50.6
CH ₂ Cl ₂ (g)	-95.5	HCl(g)	-92.3	N ₂ O(g)	+82.0
CH ₂ O(g)	-115.9	HF(g)	-272.6	N ₂ O ₄ (g)	+9.1
CH ₃ Cl(g)	-83.7	HC ₂ H ₃ O ₂ (l)	-483.5	N ₂ O ₅ (g)	+11.3
CH ₃ OH(l)	-238.4	H ₂ O(g)	-241.8	NaCl(s)	-411.1
CH ₄ (g)	-74.9	H ₂ O(l)	-285.8	NaHCO ₃ (s)	-950.8
CO(g)	-110.5	H ₂ O ₂ (l)	-187.8	NaOH(s)	-425.9
CO ₂ (g)	-393.5	HNO ₃ (l)	-174.1	Na ₂ CO ₃ (s)	-1130.8
C ₂ H ₂ (g)	+226.7	H ₂ SO ₄ (l)	-814.0	O(g)	+249.2
C ₂ H ₄ (g)	+52.5	KCl(s)	-436.7	O ₃ (g)	+142.7
C ₂ H ₆ (g)	-83.8	K ₂ SO ₄ (s)	-1437.7	PCl ₃ (g)	-288.7
C ₂ H ₅ OH(l)	-277.0	MgCl ₂ (s)	-641.6	PCl ₅ (g)	-374.9
C ₆ H ₆ (l)	+49.0	MgO(s)	-601.2	PbO(s)	-219.4
CaCO ₃ (s) ¹	-1207.6	MgCO ₃ (s)	-1111.7	SF ₆ (g)	-1220.5
CaCl ₂ (s)	-795.8	NH ₃ (g)	-45.9	SO ₂ (g)	-296.8
CaO(s)	-635.1	NH ₄ Cl(s)	-314.6	SO ₃ (g)	-395.8
Ca(OH) ₂ (s)	-986.1	NO(g)	+90.3		

¹calcite

All standard state, 25 °C and 1 bar (written to 1 decimal place).

P.J. Linstrom and W.G. Mallard, Eds, *NIST Chemistry WebBook*, *NIST Standard Reference Databases* Number 69, June 2005, National Institute of Standards and Technology, Gaithersburg MD, 20899 (<http://webbook.nist.gov>).

Lide, David R., Ed., *Handbook of Chemistry and Physics*, 84th ed.; CRC Press: Boca Raton FL, 2003, 5-1 to 5-60.