

Selected Enthalpies of Formation

from Thermodynamics of Biochemical Reactions by R. A Alberty
all data at 298.17 K (25 C), pH 7.0, Ionic Strength 0.25M

Compound	$\Delta G_f^{\circ}(\text{kJ/mol})$	$\Delta H_f^{\circ}(\text{kJ/mol})$
ATP	-2292.50	-3616.92
ADP	-1424.70	-2627.24
Citrate	-966.23	-1513.66
Isocitrate	-959.58	-1224.7
Ethanol	62.96	-290.76
Glucose	-426.71	-1267.12
Lactate	-313.70	-688.28
NAD ⁺	1059.11	-10.26
NADH	1120.09	-41.38
PEP	-1189.73	-436.2
Pyruvate	-350.78	-597.04
H ⁺	0	0
Pi	-1059.49	-1299.36
O ₂ (aq)	16.40	-11.70
O ₂ (gas)	0	0
H ₂ O (l)	-155.66	-286.65

Compound	ΔG_f° (kJ/mol)	ΔH_f° (kJ/mol)
CO ₂ (aq*)	-547.1	-692.86
CO ₂ (gas)	-394.36	-393.50
N ₂ (aq)	18.7	-10.54
N ₂ (gas)	0	0

* This is a total value for dissolved CO₂, carbonic acid, and carbonate in equilibrium at 25°C.