

Thermodynamic data at 298.15 K

Substance	State	$\Delta H_f^\ominus$ kJ mol <sup>-1</sup>	$\Delta G_f^\ominus$ kJ mol <sup>-1</sup>	$S^\ominus$ J K <sup>-1</sup> mol <sup>-1</sup>
Ag	s	0	0	42.6
Ag <sub>2</sub> O	s	-31.0	-11.2	121.3
CH <sub>3</sub> OH	g	-200.7	-162.0	239.8
C <sub>2</sub> H <sub>4</sub>	g	52.3	68.2	219.6
H <sub>2</sub> O	l	-285.8	-237.1	69.9
H <sub>2</sub> O	g	-241.8	-228.5	188.8
OH <sup>-</sup>	aq	-230.0	-157.2	-10.8
Zn	s	0	0	41.6
ZnO	s	-348.3	-318.3	43.6

Standard electrode potentials at 298.15 K

Electrode reaction	$E^\ominus/V$
$H^+(aq) + e = \frac{1}{2}H_2(g)$	0.00
$\frac{1}{2}O_2(g) + 2H^+(aq) + 2e = H_2O(l)$	+1.23
$Fe^{2+}(aq) + 2e = Fe(s)$	-0.46
$Zn^{2+}(aq) + 2e = Zn(s)$	-0.76