

Standard Entropies



Substance	$S^\circ \left(\frac{\text{J}}{\text{K mol}} \right)$	Substance	$S^\circ \left(\frac{\text{J}}{\text{K mol}} \right)$	Substance	$S^\circ \left(\frac{\text{J}}{\text{K mol}} \right)$
Ag(s)	42.6	CaSO ₄ (s)	106.5	NO ₂ (g)	240.0
AgCl(s)	96.3	Cl ₂ (g)	223.1	N ₂ (g)	191.6
Al(s)	28.3	F ₂ (g)	202.8	N ₂ H ₄ (g)	238.7
Al ₂ O ₃ (s)	50.9	Fe(s)	27.3	N ₂ H ₄ (l)	121.5
Br ₂ (l)	152.2	Fe ₂ O ₃ (s)	87.4	N ₂ O(g)	220.0
C(s) ¹	5.6	HBr(g)	198.7	N ₂ O ₄ (g)	304.4
CHCl ₃ (g)	295.6	HCl(g)	186.9	N ₂ O ₅ (g)	346.6
CH ₂ Cl ₂ (g)	270.3	HF(g)	173.8	Na(s)	51.5
CH ₂ O(g)	219.0	HC ₂ H ₃ O ₂ (l)	158.0	NaCl(s)	72.1
CH ₃ Cl(g)	234.4	H ₂ (g)	130.7	NaHCO ₃ (s)	101.7
CH ₃ OH(l)	127.2	H ₂ O(g)	188.8	NaOH(s)	64.4
CH ₄ (g)	186.3	H ₂ O(l)	70.0	Na ₂ CO ₃ (s)	138.8
CO(g)	197.7	H ₂ O ₂ (l)	109.6	O(g)	161.1
CO ₂ (g)	213.8	H ₂ S(g)	205.8	O ₂ (g)	205.2
C ₂ H ₂ (g)	200.9	H ₂ SO ₄ (l)	156.9	O ₃ (g)	238.9
C ₂ H ₄ (g)	219.3	K(s)	64.6	P(s) ³	41.1
C ₂ H ₆ (g)	229.2	KCl(s)	82.6	PCl ₃ (g)	311.6
C ₂ H ₅ OH(l)	159.9	K ₂ SO ₄ (s)	175.6	PCl ₅ (g)	364.2
C ₃ H ₅ N ₃ O ₉ (l)	unavailable	Mg(s)	32.7	Pb(s)	64.8
C ₆ H ₆ (l)	173.3	MgCl ₂ (s)	89.6	PbO(s)	66.5
Ca(s)	41.6	MgO(s)	26.9	PbS(s)	91.3
CaCO ₃ (s) ²	91.7	MgCO ₃ (s)	65.8	S(s) ⁴	32.1
CaCl ₂ (s)	104.6	NH ₃ (g)	192.8	SF ₆ (g)	291.5
CaO(s)	38.2	NH ₄ Cl(s)	94.8	SO ₂ (g)	248.2
Ca(OH) ₂ (s)	83.4	NO(g)	210.8	SO ₃ (g)	256.8

¹graphite

²calcite

³white

⁴rhombic

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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 Database Number 69, National Institute of Standards and Technology, Gaithersburg MD, 20899, <http://webbook.nist.gov>, (retrieved March 9, 2011).

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