magnesium

Inchi: InChI=1S/Mg
InchiKey: FYYHWMGAXLPEAU-UHFFFAOYSA-N
Formula: Mg
SMILES: [Mg]
Mol. weight [g/mol]: 24.30
CAS: 7439-95-4

Physical Properties

Property code	Value	Unit	Source
affp	819.60	kJ/mol	NIST Webbook
basg	797.30	kJ/mol	NIST Webbook
hf	147.10 ± 0.80	kJ/mol	NIST Webbook
ie	7.65	eV	NIST Webbook
ie	7.65	eV	NIST Webbook
ie	7.65	eV	NIST Webbook
ie	7.65	eV	NIST Webbook
ie	7.30	eV	NIST Webbook
ie	7.65	eV	NIST Webbook
ie	7.50 ± 0.20	eV	NIST Webbook
ie	7.63 ± 0.08	eV	NIST Webbook
ie	7.72 ± 0.05	eV	NIST Webbook
sgb	148.65 ± 0.00	J/mol×K	NIST Webbook
ss	32.67 ± 0.10	J/mol×K	NIST Webbook
tb	1363.00 ± 1.50	K	NIST Webbook
tt	922.00 ± 0.60	K	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.44733e+01
Coeff. B	-1.20956e+04
Coeff. C	-1.35440e+02

Temperature range (K), min.	701.15
Temperature range (K), max.	1361.15

Sources

The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Thermodynamic study of MgO-Sb2O3 system and the stability functions of magnesium antimonite:	https://www.doi.org/10.1016/j.jct.2013.12.032
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7439954&Units=SI

Legend

affp:	Proton affinity
basg:	Gas basicity
hf:	Enthalpy of formation at standard conditions
ie:	Ionization energy
pvap:	Vapor pressure
sgb:	Molar entropy at standard conditions (1 bar)
ss:	Solid phase molar entropy at standard conditions
tb:	Normal Boiling Point Temperature
tt:	Triple Point Temperature