rubidium

Inchi: InChI=1S/Rb
InchiKey: IGLNJRXAVVLDKE-UHFFFAOYSA-N
Formula: Rb
SMILES: [Rb]
Mol. weight [g/mol]: 85.47
CAS: 7440-17-7

Physical Properties

Property code	Value	Unit	Source
ea	0.49 ± 0.00	eV	NIST Webbook
ea	0.49 ± 0.00	eV	NIST Webbook
hf	80.90 ± 0.80	kJ/mol	NIST Webbook
ie	4.18 ± 0.00	eV	NIST Webbook
ie	4.18 ± 0.00	eV	NIST Webbook
ie	4.18	eV	NIST Webbook
ie	4.18	eV	NIST Webbook
sgb	170.09 ± 0.00	J/mol×K	NIST Webbook
ss	76.78 ± 0.30	J/mol×K	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.41029e+01
Coeff. B	-9.04035e+03
Coeff. C	-7.99000e+00
Temperature range (K), min.	433.55
Temperature range (K), max.	961.15

Sources

A calorimetric investigation of A2[(UO2)2(WO5)O] compounds with A = K, Rb and Cs and calculated phase relations in the K2WO4-UO3-H2O and K2MoO4-K2WO4-UO3-H2O systems:	https://www.doi.org/10.1016/j.jct.2017.03.039
Synthesis and energetics of Na, K, Rb and Cs salts by reaction with [18]crown-6 and 1,4-butanediol:	https://www.doi.org/10.1016/j.jct.2017.07.025
K2MoO4-K2WO4-UO3-H2O systems:	https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=1962
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7440177&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Legend

ea:	Electron affinity
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