

cadmium

Inchi: InChI=1S/Cd
InchiKey: BDOSMKKIYDKNTQ-UHFFFAOYSA-N
Formula: Cd
SMILES: [Cd]
Mol. weight [g/mol]: 112.41
CAS: 7440-43-9

Physical Properties

Property code	Value	Unit	Source
hf	111.80 ± 0.20	kJ/mol	NIST Webbook
ie	8.99	eV	NIST Webbook
ie	8.99 ± 0.00	eV	NIST Webbook
ie	8.99	eV	NIST Webbook
ie	8.99 ± 0.00	eV	NIST Webbook
ie	9.07 ± 0.07	eV	NIST Webbook
ie	8.99	eV	NIST Webbook
sgb	167.75 ± 0.00	J/mol×K	NIST Webbook
ss	51.80 ± 0.15	J/mol×K	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.56233e+01
Coeff. B	-1.09548e+04
Coeff. C	-4.47100e+01
Temperature range (K), min.	393.00
Temperature range (K), max.	1040.15

Sources

Thermal conductivities of solid and liquid phases in Pb Cd and Sn Zn binary metallic alloys:

<https://www.doi.org/10.1016/j.tca.2007.01.009>

The Yaws Handbook of Vapor Pressure:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C7440439&Units=SI>

Thermal conductivity and interfacial

<https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

energy of solid Bi solution in the

<https://www.doi.org/10.1016/j.fluid.2010.02.029>

Bi-Pb eutectic system:

<https://www.doi.org/10.1016/j.jct.2013.07.001>

Enthalpy of mixing in the Ag-Cd-In

<https://www.doi.org/10.1016/j.jct.2016.12.005>

ternary system

for Cu₂H₂Sn₃ and Cu₂H₂Sn₄(s) (M = Cu and

<https://www.doi.org/10.1016/j.jct.2017.07.020>

Cd):

A calorimetric and thermodynamic investigation of zinc and cadmium hydrous selenites:

Legend

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

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