sodium iodide

Inchi: InChI=1S/HI.Na/h1H;/q;+1/p-1
InchiKey: FVAUCKIRQBBSSJ-UHFFFAOYSA-M
Formula: INa
SMILES: [Na]I
Mol. weight [g/mol]: 149.89
CAS: 7681-82-5

Physical Properties

Property code	Value	Unit	Source
ea	0.87 ± 0.10	eV	NIST Webbook
ie	7.62 ± 0.02	eV	NIST Webbook
ie	7.60	eV	NIST Webbook
ie	8.20 ± 0.10	eV	NIST Webbook
ie	7.80 ± 0.40	eV	NIST Webbook
ie	7.60 ± 0.10	eV	NIST Webbook
ie	7.64 ± 0.02	eV	NIST Webbook
ie	7.64	eV	NIST Webbook
ie	8.00 ± 0.30	eV	NIST Webbook
ie	8.70 ± 0.30	eV	NIST Webbook
ie	8.00	eV	NIST Webbook
ie	7.60 ± 0.10	eV	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.61525e+01
Coeff. B	-1.69516e+04
Coeff. C	-1.07310e+02
Temperature range (K), min.	1040.15
Temperature range (K), max.	1577.00

Sources

Solubility, Density and Solution Thermodynamics of NaI in Different Pure Solvents and Binary Mixtures:	https://www.doi.org/10.1021/je300754n
Study of activity coefficients for sodium iodide in (methanol + benzene) system by (vapour + liquid) equilibrium measurement at	https://www.doi.org/10.1016/j.jct.2006.06.002
Density of ethanolic alkali halide salt solutions by experiment andmolecular simulation:	https://www.doi.org/10.1016/j.fluid.2015.08.005
Conductometric study of some alkali metal halides in (dimethyl sulfoxide + acetonitrile) at T = 298.15 K:	https://www.doi.org/10.1016/j.jct.2009.03.005
Conductance Studies of NaCl, KCl, NaBr, NaI, NaBPh4, and Bu4NI in Water + 2-Ethoxyethanol Mixtures at 298.15 K:	https://www.doi.org/10.1021/je9006184
Temperature Dependence of the Density of Aqueous Alkali Halide Salt Solutions by Experiment and Molecular Simulation:	https://www.doi.org/10.1021/je500420g
Measuring and modeling aqueous electrolyte/amino-acid solutions with ePC-SAFT:	https://www.doi.org/10.1016/j.jct.2013.08.018
Enthalpies of Dilution of (2S,3R,4R,5R)-Hexane-1,2,3,4,5,6-hexol in Water and Aqueous Sodium Halide Solutions at T = (298.15 to 328.15) K:	https://www.doi.org/10.1021/je1007394
Measuring the Refractive Index, Density, Viscosity, pH, and Surface Tension of Solutions for Refractive Index Matching in Flow Experiments:	https://www.doi.org/10.1021/acs.jced.7b00904
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Activity Coefficients and Volumetric Properties for the NaI + Maltose + Water System at 298.15 K:	https://www.doi.org/10.1021/je700366w
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7681825&Units=SI
Excess volumes and excess heat capacities of {1,2- alkanediol + methanol} mixtures and ionic volumes in these systems:	https://www.doi.org/10.1016/j.fluid.2015.05.016
Density of Methanolic Alkali Halide Salt Solutions by Experiment and Molecular Simulation:	https://www.doi.org/10.1021/je5009944
Ionic molar volumes in methanol mixtures with acetonitrile, N,N-dimethylformamide and propylene carbonate at T = 298.15 K:	https://www.doi.org/10.1016/j.jct.2014.02.021
Solubilities of imidazolium based ionic liquids in aqueous salt solutions at 298.15 K:	https://www.doi.org/10.1016/j.jct.2011.03.002
Investigation of Surface Properties for Electrolyte Solutions: Measurement and Prediction of Surface Tension for Aqueous Concentrated Electrolyte Solutions:	https://www.doi.org/10.1021/acs.jced.7b00503

Legend

ea:	Electron affinity
ie:	Ionization energy
pvap:	Vapor pressure