potassium hydroxide

Inchi: InChI=1S/K.H2O/h;1H2/q+1;/p-1
InchiKey: KWYUFKZDYYNOTN-UHFFFAOYSA-M
Formula: HKO
SMILES: O[K]
Mol. weight [g/mol]: 56.11
CAS: 1310-58-3

Physical Properties

Property code	Value	Unit	Source
affp	1101.80	kJ/mol	NIST Webbook
basg	1075.40	kJ/mol	NIST Webbook
ie	7.50 ± 1.00	eV	NIST Webbook
ie	7.50 ± 0.15	eV	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.42925e+01
Coeff. B	-1.45074e+04
Coeff. C	-1.00390e+02
Temperature range (K), min.	679.00
Temperature range (K), max.	1600.00

Sources

Solubility of Sodium Oxalate in Concentrated Electrolyte Solutions:	https://www.doi.org/10.1021/acs.jced.7b00690
Densities and Heat Capacities of the Ammonia + Water + NaOH and Ammonia + Water + KOH Solutions:	https://www.doi.org/10.1021/je050512z
Thermochemistry of Li, Na, K, Rb and Cs alkylated phenoxides:	https://www.doi.org/10.1016/j.tca.2005.02.027
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1310583&Units=SI

Measurement and modelling of solubility for calcium sulfate dihydrate and calcium hydroxide in NaOH/KOH solutions	https://www.doi.org/10.1016/j.fluid.2010.06.012
Thermodynamic characterisation of reactions with KH(PO3H):	https://www.doi.org/10.1016/j.tca.2012.08.020
Solubility of the System KOH K2CrO4 Al2O3 H2O at 150 deg C in a High Alkali Concentrated Region:	https://www.doi.org/10.1021/je3004782
Vapor Pressure Determination of the KOH + K2CrO4 + H2O System:	https://www.doi.org/10.1021/je0501538
Density Calculations for (Na, K)BH4 + (Na, K)BO2 + (Na, K)OH + H2O Solutions Used in Hydrogen Power Engineering	https://www.doi.org/10.1021/je200216n
Liquid–Liquid Equilibria of Aqueous Biphasic Systems Containing Selected Imidazolium Ionic Liquids and Salts	https://www.doi.org/10.1021/je700315u
Density, viscosity, and N2O solubility of aqueous amino acid salt and amine amino acid salt solutions.	https://www.doi.org/10.1016/j.jct.2011.09.012
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Vapor-Liquid Equilibria of Ammonia + Water + Potassium Hydroxide and Ammonia + Water + Sodium Hydroxide Solutions at Temperatures from (293.15 to 353.15) K:	https://www.doi.org/10.1021/je049708+

Legend

affp:	Proton affinity
basg:	Gas basicity
ie:	Ionization energy
pvap:	Vapor pressure