

Lithium acetate dihydrate

Other names:	lithium ethanoate dihydrate
Inchi:	InChI=1S/C2H4O2.Li.2H2O/c1-2(3)4;;;/h1H3,(H,3,4);;2*1H2/q;+1;;/p-1
InchiKey:	IAQLJCYTGRCMXMA-UHFFFAOYSA-M
Formula:	C2H7LiO4
SMILES:	CC(=O)[O-].O.O.[Li+]
Mol. weight [g/mol]:	102.01

Physical Properties

Property code	Value	Unit	Source
af	0.0805		Cheméo Relay (1.0)
gf	-401.73	kJ/mol	Cheméo Relay (1.0, beta)
hf	-817.22	kJ/mol	Cheméo Relay (1.0)
hvap	61.67	kJ/mol	Cheméo Relay (1.0)
ie	9.51	eV	Cheméo Relay (1.0)
log10ws	0.48		Cheméo Relay (1.0)
pc	13370.08	kPa	Cheméo Relay (1.0, beta)
tb	622.00	K	Cheméo Relay (1.0)
tc	944.70	K	Cheméo Relay (1.0)
tf	557.00 ± 1.00	K	NIST Webbook
tt	12.00	K	Low-temperature structural phase transition in deuterated and protonated lithium acetate dihydrate
vc	0.097	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	169.70	J/mol×K	298.15	NIST Webbook

Sources

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

Low-temperature structural phase transition in deuterated and protonated lithium acetate dihydrate
Volume and Viscometric Studies of Some Metal Acetates in Aqueous Solution (288.15 to 318.15) K:
NIST Webbook

<https://www.doi.org/10.1016/j.jct.2010.03.006>

<https://www.doi.org/10.1021/jc800326n>

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C6108174&Units=SI>

Legend

af:	Acentric Factor
cps:	Solid phase heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature
vc:	Critical Volume

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