Propanamide, 2-hydroxy-

Other names:	Lactamide
	«alpha»-Hydroxypropionamide
	Lactic acid amide
	Lactic amide
	2-Hydroxypropionamide
	2-Hydroxy-propanamide
Inchi:	InChI=1S/C3H7NO2/c1-2(5)3(4)6/h2,5H,1H3,(H2,4,6)
InchiKey:	SXQFCVDSOLSHOQ-UHFFFAOYSA-N
Formula:	C3H7NO2
SMILES:	CC(O)C(N)=O
Mol. weight [g/mol]:	89.09
CAS:	2043-43-8

Physical Properties

Property code	Value	Unit	Source
gf	-227.35	kJ/mol	Joback Method
hf	-341.55	kJ/mol	Joback Method
hfus	10.89	kJ/mol	Joback Method
hvap	55.95	kJ/mol	Joback Method
log10ws	0.34		Crippen Method
logp	-1.147		Crippen Method
mcvol	70.550	ml/mol	McGowan Method
pc	6046.69	kPa	Joback Method
tb	486.18	K	Joback Method
tc	677.88	K	Joback Method
tf	302.58	K	Joback Method
vc	0.252	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	151.30	J/mol×K	486.18	Joback Method
cpg	157.40	J/mol×K	518.13	Joback Method
cpg	163.22	J/mol×K	550.08	Joback Method

cpg	168.75	J/mol×K	582.03	Joback Method
cpg	174.01	J/mol×K	613.98	Joback Method
cpg	179.00	J/mol×K	645.93	Joback Method
cpg	183.73	J/mol×K	677.88	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2043438&Units=SI

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume