

Acetamide, 2-(2-hydroxyethoxy)-

Other names:	O-(2-Hydroxyethyl)glycolamide 2-(2-Hydroxyethoxy)acetamide (2-Hydroxyethoxy)acetamide
Inchi:	InChI=1S/C4H9NO3/c5-4(7)3-8-2-1-6/h6H,1-3H2,(H2,5,7)
InchiKey:	INNWRDCESBMSQK-UHFFFAOYSA-N
Formula:	C4H9NO3
SMILES:	NC(=O)COCCO
Mol. weight [g/mol]:	119.12
CAS:	123-85-3

Physical Properties

Property code	Value	Unit	Source
gf	-321.49	kJ/mol	Joback Method
hf	-489.13	kJ/mol	Joback Method
hfus	18.19	kJ/mol	Joback Method
hvap	60.97	kJ/mol	Joback Method
log10ws	0.94		Crippen Method
logp	-1.519		Crippen Method
mcvol	90.510	ml/mol	McGowan Method
pc	5051.40	kPa	Joback Method
tb	531.92	K	Joback Method
tc	716.39	K	Joback Method
tf	351.08	K	Joback Method
vc	0.332	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	210.53	J/mol×K	531.92	Joback Method
cpg	217.65	J/mol×K	562.67	Joback Method
cpg	224.49	J/mol×K	593.41	Joback Method
cpg	231.04	J/mol×K	624.16	Joback Method
cpg	237.31	J/mol×K	654.90	Joback Method
cpg	243.30	J/mol×K	685.65	Joback Method

Sources

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=C123853&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

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