Propanamide, N-ethyl-

Other names: Propionamide, N-ethyl-
N-Ethylpropionamide
Inchi: InChI=1S/C5H11NO/c1-3-5(7)6-4-2/h3-4H2,1-2H3,(H,6,7)
InchiKey: ABMDIECEEGFXNC-UHFFFAOYSA-N
Formula: C5H11NO
SMILES: CCNC(=O)CC
Mol. weight [g/mol]: 101.15
CAS: 5129-72-6

Physical Properties

Property code	Value	Unit	Source
gf	-48.31	kJ/mol	Joback Method
hf	-205.64	kJ/mol	Joback Method
hfus	15.40	kJ/mol	Joback Method
hvap	39.91	kJ/mol	Joback Method
log10ws	-0.88		Crippen Method
logp	0.532		Crippen Method
mcvol	92.860	ml/mol	McGowan Method
pc	3801.00	kPa	Joback Method
tb	417.84	K	Joback Method
tc	601.20	K	Joback Method
tf	248.70	K	Joback Method
vc	0.356	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	179.79	J/mol×K	417.84	Joback Method
cpg	189.39	J/mol×K	448.40	Joback Method
cpg	198.59	J/mol×K	478.96	Joback Method
cpg	207.41	J/mol×K	509.52	Joback Method
cpg	215.86	J/mol×K	540.08	Joback Method
cpg	223.93	J/mol×K	570.64	Joback Method
cpg	231.65	J/mol×K	601.20	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=C5129726&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