2-Propenamide, N,N,2-trimethyl-

Other names: Acrylamide, N,N,2-trimethyl-
N,N-Dimethylmethacrylamide
Inchi: InChI=1S/C6H11NO/c1-5(2)6(8)7(3)4/h1H2,2-4H3
InchiKey: QRWZCJXEAOZAAW-UHFFFAOYSA-N
Formula: C6H11NO
SMILES: C=C(C)C(=O)N(C)C
Mol. weight [g/mol]: 113.16
CAS: 6976-91-6

Physical Properties

Property code	Value	Unit	Source
affp	911.50	kJ/mol	NIST Webbook
basg	880.60	kJ/mol	NIST Webbook
gf	60.79	kJ/mol	Joback Method
hf	-96.58	kJ/mol	Joback Method
hfus	13.33	kJ/mol	Joback Method
hvap	37.15	kJ/mol	Joback Method
log10ws	-0.53		Crippen Method
logp	0.651		Crippen Method
mcvol	102.650	ml/mol	McGowan Method
pc	3517.91	kPa	Joback Method
tb	399.55	K	Joback Method
tc	582.82	K	Joback Method
tf	224.06	K	Joback Method
vc	0.378	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	190.54	J/mol×K	399.55	Joback Method
cpg	201.40	J/mol×K	430.10	Joback Method
cpg	211.73	J/mol×K	460.64	Joback Method
cpg	221.55	J/mol×K	491.19	Joback Method
cpg	230.88	J/mol×K	521.73	Joback Method

cpg	239.74	J/mol×K	552.28	Joback Method
cpg	248.15	J/mol×K	582.82	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=C6976916&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

affp:	Proton affinity
basg:	Gas basicity
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