Butanamide, N,N,3,3-tetramethyl-

Other names:	N,N,3,3-Tetramethylbutanamide
	neo-C5H11CON(CH3)2
Inchi:	InChI=1S/C8H17NO/c1-8(2,3)6-7(10)9(4)5/h6H2,1-5H3
InchiKey:	HUVUVZVJVODYRV-UHFFFAOYSA-N
Formula:	C8H17NO
SMILES:	CN(C)C(=O)CC(C)(C)C
Mol. weight [g/mol]:	143.23
CAS:	26153-90-2

Physical Properties

Property code	Value	Unit	Source
affp	927.70	kJ/mol	NIST Webbook
basg	896.70	kJ/mol	NIST Webbook
gf	1.18	kJ/mol	Joback Method
hf	-262.25	kJ/mol	Joback Method
hfus	13.68	kJ/mol	Joback Method
hvap	40.90	kJ/mol	Joback Method
log10ws	-1.27		Crippen Method
logp	1.511		Crippen Method
mcvol	135.130	ml/mol	McGowan Method
pc	2752.67	kPa	Joback Method
tb	445.52	K	Joback Method
tc	630.23	K	Joback Method
tf	264.74	K	Joback Method
vc	0.496	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	288.81	J/mol×K	445.52	Joback Method
cpg	303.56	J/mol×K	476.31	Joback Method
cpg	317.52	J/mol×K	507.09	Joback Method
cpg	330.72	J/mol×K	537.88	Joback Method
cpg	343.21	J/mol×K	568.66	Joback Method

cpg	355.01	J/mol×K	599.45	Joback Method
cpg	366.15	J/mol×K	630.23	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=C26153902&Units=SI

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