N,N-Dimethylacetoacetamide

Other names:	Butanamide, N,N-dimethyl-3-oxo-
	Acetoacetamide, N,N-dimethyl-
	Acetylacetamide, N,N-dimethyl-
	Dimethylamid kyseliny acetoctove
	N,N-dimethyl-3-oxobutyramide
Inchi:	InChI=1S/C6H11NO2/c1-5(8)4-6(9)7(2)3/h4H2,1-3H3
InchiKey:	YPEWWOUWRRQBAX-UHFFFAOYSA-N
Formula:	C6H11NO2
SMILES:	CC(=O)CC(=O)N(C)C
Mol. weight [g/mol]:	129.16
CAS:	2044-64-6

Physical Properties

Property code	Value	Unit	Source
gf	-147.42	kJ/mol	Joback Method
hf	-324.80	kJ/mol	Joback Method
hfus	17.52	kJ/mol	Joback Method
hvap	44.48	kJ/mol	Joback Method
log10ws	0.04		Crippen Method
logp	0.054		Crippen Method
mcvol	108.520	ml/mol	McGowan Method
pc	3585.64	kPa	Joback Method
tb	493.00	K	NIST Webbook
tc	644.41	K	Joback Method
tf	289.71	K	Joback Method
vc	0.402	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	223.38	J/mol×K	456.86	Joback Method
cpg	233.95	J/mol×K	488.12	Joback Method
cpg	244.00	J/mol×K	519.38	Joback Method
cpg	253.56	J/mol×K	550.63	Joback Method

cpg	262.64	J/mol×K	581.89	Joback Method
cpg	271.25	J/mol×K	613.15	Joback Method
cpg	279.41	J/mol×K	644.41	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2044646&Units=SI
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

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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