Carbamic acid, dimethyl-, ethyl ester

Other names:	Ethyl dimethylcarbamate
	Dimethylethoxyformamide
	Ethyl N,N-dimethylcarbamate
	C2H5OC(O)N(CH3)2
	(CH3)2NCOOC2H5
Inchi:	InChI=1S/C5H11NO2/c1-4-8-5(7)6(2)3/h4H2,1-3H3
InchiKey:	SUDHEDJJFGYYPL-UHFFFAOYSA-N
Formula:	C5H11NO2
SMILES:	CCOC(=O)N(C)C
Mol. weight [g/mol]:	117.15
CAS:	687-48-9

Physical Properties

Property code	Value	Unit	Source
affp	896.60	kJ/mol	NIST Webbook
basg	865.60	kJ/mol	NIST Webbook
gf	-131.92	kJ/mol	Joback Method
hf	-323.80	kJ/mol	Joback Method
hfus	14.51	kJ/mol	Joback Method
hvap	37.92	kJ/mol	Joback Method
log10ws	-0.33		Crippen Method
logp	0.705		Crippen Method
mcvol	98.730	ml/mol	McGowan Method
pc	3655.35	kPa	Joback Method
tb	402.53	K	Joback Method
tc	579.52	K	Joback Method
tf	250.74	K	Joback Method
vc	0.357	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	190.41	J/mol×K	402.53	Joback Method
cpg	200.15	J/mol×K	432.03	Joback Method

cpg	209.53	J/mol×K	461.53	Joback Method
cpg	218.57	J/mol×K	491.03	Joback Method
cpg	227.26	J/mol×K	520.53	Joback Method
cpg	235.61	J/mol×K	550.03	Joback Method
cpg	243.61	J/mol×K	579.52	Joback Method

Sources

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=C687489&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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