Carbamic acid, ethylidenebis-, diethyl ester

Other names:	Carbamic acid, ethylidenedi-, diethyl ester
	Ethylidene diurethane
	Diethyl ethyldienebis-carbamate
	Diethyl ethylenedicarbamate
	Ethylidene diurethan
	N,N'-Ethylidene-bis(ethyl carbamate)
	Carbamic acid, ethylenebis-, diethyl ester
Inchi:	InChI=1S/C8H16N2O4/c1-4-13-7(11)9-6(3)10-8(12)14-5-2/h6H,4-5H2,1-3H3,(H,9,11)(H,
InchiKey:	HJKLTZHYQUEWLY-UHFFFAOYSA-N
Formula:	C8H16N2O4
SMILES:	CCOC(=O)NC(C)NC(=O)OCC
Mol. weight [g/mol]:	204.22
CAS:	539-71-9

Physical Properties

Property code	Value	Unit	Source
chs	-4453.90 ± 4.20	kJ/mol	NIST Webbook
gf	-275.02	kJ/mol	Joback Method
hf	-596.39	kJ/mol	Joback Method
hfs	-980.90 ± 4.20	kJ/mol	NIST Webbook
hfus	28.73	kJ/mol	Joback Method
hvap	64.20	kJ/mol	Joback Method
log10ws	-1.84		Crippen Method
logp	0.825		Crippen Method
mcvol	158.420	ml/mol	McGowan Method
pc	2890.51	kPa	Joback Method
tb	634.92	K	Joback Method
tc	825.06	K	Joback Method
tf	414.56	K	Joback Method
vc	0.596	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	419.24	J/mol×K	634.92	Joback Method
cpg	431.34	J/mol×K	666.61	Joback Method
cpg	442.84	J/mol×K	698.30	Joback Method
cpg	453.73	J/mol×K	729.99	Joback Method
cpg	464.02	J/mol×K	761.68	Joback Method
cpg	473.69	J/mol×K	793.37	Joback Method
cpg	482.75	J/mol×K	825.06	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C539719&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

Legend

chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase 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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