1,2-Hydrazinedicarboxylic acid, diethyl ester

Other names:	Bicarbamic acid, diethyl ester
	s-Dicarbethoxyhydrazine
	sym-Dicarbethoxyhydrazine
	Diethyl bicarbamate
	Diethyl hydrazodicarboxylate
	Diethyl 1,2-hydrazinedicarboxylate
	1,2-Bis(ethoxycarbonyl)hydrazine
	1,2-Dicarbethoxyhydrazine
	N,N'-Dicarboethoxyhydrazine
	N,N'-Dicarbethoxyhydrazine
	Diethyl sym-hydrazinedicarboxylate
	N,N'-Diethoxycarbonylhydrazine
	Diethyl ester of 1,2-Hydrazinedicarboxylic acid
	1,2-Hydrazinedicarboxylic acid, 1,2-diethyl ester
	Ethyl hydrazoformate
	NSC 122715
	NSC 17295
	NSC 227421
	NSC 3002
Inchi:	InChI=1S/C6H12N2O4/c1-3-11-5(9)7-8-6(10)12-4-2/h3-4H2,1-2H3,(H,7,9)(H,8,10)
InchiKey:	JXMLAPZRDDWRRV-UHFFFAOYSA-N
Formula:	C6H12N2O4
SMILES:	CCOC(=O)NNC(=O)OCC
Mol. weight [g/mol]:	176.17
CAS:	4114-28-7

Physical Properties

Property code	Value	Unit	Source
gf	-289.42	kJ/mol	Joback Method
hf	-549.83	kJ/mol	Joback Method
hfus	27.07	kJ/mol	Joback Method
hvap	60.13	kJ/mol	Joback Method
log10ws	-1.38		Crippen Method
logp	0.394		Crippen Method
mcvol	130.240	ml/mol	McGowan Method
pc	3560.02	kPa	Joback Method
tb	523.20	K	NIST Webbook

tc	780.56	K	Joback Method
tf	407.02	K	Joback Method
vc	0.489	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	323.05	J/mol×K	589.60	Joback Method
cpg	333.32	J/mol×K	621.43	Joback Method
cpg	343.13	J/mol×K	653.25	Joback Method
cpg	352.47	J/mol×K	685.08	Joback Method
cpg	361.33	J/mol×K	716.91	Joback Method
cpg	369.71	J/mol×K	748.74	Joback Method
cpg	377.59	J/mol×K	780.56	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C4114287&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

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