Hydrazine, 1,2-diethyl-

Other names:	1,2-Diaethylhydrazin
	1,2-Diethylhydrazine
	Hydrazoethane
	Hydroazoethane
	N,N'-Diethylhydrazine
	Rcra waste number U086
	SDEH
	sym-Diethylhydrazine
Inchi:	InChI=1S/C4H12N2/c1-3-5-6-4-2/h5-6H,3-4H2,1-2H3
InchiKey:	YCBOYOYVDOUXLH-UHFFFAOYSA-N
Formula:	C4H12N2
SMILES:	CCNNCC
Mol. weight [g/mol]:	88.15
CAS:	1615-80-1

Physical Properties

Property code	Value	Unit	Source
gf	161.58	kJ/mol	Joback Method
hf	-18.95	kJ/mol	Joback Method
hfus	16.31	kJ/mol	Joback Method
hvap	37.37	kJ/mol	Joback Method
ie	8.81	eV	NIST Webbook
ie	8.88	eV	NIST Webbook
log10ws	-0.87		Crippen Method
logp	0.120		Crippen Method
mcvol	87.180	ml/mol	McGowan Method
pc	4026.13	kPa	Joback Method
rinpol	710.00		NIST Webbook
rinpol	710.00		NIST Webbook
tb	358.70	K	NIST Webbook
tc	567.87	K	Joback Method
tf	240.16	K	Joback Method
vc	0.330	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	165.53	J/mol×K	391.26	Joback Method
cpg	175.20	J/mol×K	420.69	Joback Method
cpg	184.48	J/mol×K	450.13	Joback Method
cpg	193.40	J/mol×K	479.56	Joback Method
cpg	201.95	J/mol×K	509.00	Joback Method
cpg	210.16	J/mol×K	538.43	Joback Method
cpg	218.02	J/mol×K	567.87	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.56195e+01
Coeff. B	-3.49669e+03
Coeff. C	-4.08550e+01
Temperature range (K), min.	268.92
Temperature range (K), max.	380.07

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=C1615801&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume