1,2-Ethanediamine, N,N,N',N'-tetraethyl-

Other names:	Ethylenediamine, N,N,N',N'-tetraethyl- N,N,N',N'-Tetraethylenediamine N,N,N',N'-Tetraethylethylenediamine Tetraethylethylenediamine N,N,N,N-Tetraethylethylenediamine
Inchi:	InChI=1S/C10H24N2/c1-5-11(6-2)9-10-12(7-3)8-4/h5-10H2,1-4H3
InchiKey:	DIHKMUNUGQVFES-UHFFFAOYSA-N
Formula:	C10H24N2
SMILES:	CCN(CC)CCN(CC)CC
Mol. weight [g/mol]:	172.31
CAS:	150-77-6

Physical Properties

Property code	Value	Unit	Source
gf	254.88	kJ/mol	Joback Method
hf	-114.67	kJ/mol	Joback Method
hfus	27.70	kJ/mol	Joback Method
hvap	41.94	kJ/mol	Joback Method
log10ws	-1.15		Crippen Method
logp	1.670		Crippen Method
mcvol	171.720	ml/mol	McGowan Method
pc	2100.34	kPa	Joback Method
rinpol	1092.00		NIST Webbook
ripol	1225.00		NIST Webbook
ripol	1207.00		NIST Webbook
ripol	1192.00		NIST Webbook
ripol	1185.00		NIST Webbook
ripol	1205.00		NIST Webbook
ripol	1199.00		NIST Webbook
tb	463.70	K	NIST Webbook
tc	613.08	K	Joback Method
tf	267.40	K	Joback Method
vc	0.631	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	380.84	J/mol×K	453.08	Joback Method
cpg	397.52	J/mol×K	479.75	Joback Method
cpg	413.52	J/mol×K	506.41	Joback Method
cpg	428.85	J/mol×K	533.08	Joback Method
cpg	443.53	J/mol×K	559.75	Joback Method
cpg	457.59	J/mol×K	586.41	Joback Method
cpg	471.05	J/mol×K	613.08	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C150776&Units=SI

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
rinpol: Non-polar retention indices
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume