Diethylenetriamine, 4-[2-(dimethylamino)ethyl]-1,1,7,7-tetramethyl-

Other names: 1,2-Ethanediamine, N1,N1-bis[2-(dimethylamino)ethyl]-N2,N2-dimethyl-
Inchi: InChI=1S/C12H30N4/c1-13(2)7-10-16(11-8-14(3)4)12-9-15(5)6/h7-12H2,1-6H3
InchiKey: VMGSQCIDWAUGLQ-UHFFFAOYSA-N
Formula: C12H30N4
SMILES: CN(C)CCN(CCN(C)C)CCN(C)C
Mol. weight [g/mol]: 230.39
CAS: 33527-91-2

Physical Properties

Property code	Value	Unit	Source
gf	493.28	kJ/mol	Joback Method
hf	-20.89	kJ/mol	Joback Method
hfus	38.92	kJ/mol	Joback Method
hvap	50.48	kJ/mol	Joback Method
log10ws	0.87		Crippen Method
logp	-0.027		Crippen Method
mcvol	219.860	ml/mol	McGowan Method
pc	1768.38	kPa	Joback Method
tb	523.72	K	Joback Method
tc	680.37	K	Joback Method
tf	354.88	K	Joback Method
vc	0.779	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	552.20	J/mol×K	523.72	Joback Method
cpg	571.10	J/mol×K	549.83	Joback Method
cpg	589.16	J/mol×K	575.94	Joback Method
cpg	606.40	J/mol×K	602.04	Joback Method
cpg	622.88	J/mol×K	628.15	Joback Method
cpg	638.60	J/mol×K	654.26	Joback Method
cpg	653.60	J/mol×K	680.37	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=C33527912&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume