N,N',N''-Trimethyldiitrimethylenetriamine

Other names:	3,3'-Methyliminobis(N-methylpropylamine)
	3,3'-Bis(methylamino)-N-methyldipropylamine
	1,3-Propanediamine, N,N'-dimethyl-N-[3-(methylamino)propyl]-
	Dipropylamine, N-methyl-3,3'-bis(methylamino)-
	N,N'-Dimethylmethyliminobis(dipropylamine)
	methylbis(3-methylaminopropyl)amine
	N,n',n''-trimethyldiitrimethylenetriamine
Inchi:	InChI=1S/C9H23N3/c1-10-6-4-8-12(3)9-5-7-11-2/h10-11H,4-9H2,1-3H3
InchiKey:	PQYGBJHVVYREGU-UHFFFAOYSA-N
Formula:	C9H23N3
SMILES:	CNCCCN(C)CCCNC
Mol. weight [g/mol]:	173.30
CAS:	123-70-6

Physical Properties

Property code	Value	Unit	Source
gf	314.46	kJ/mol	Joback Method
hf	-54.62	kJ/mol	Joback Method
hfus	32.28	kJ/mol	Joback Method
hvap	50.54	kJ/mol	Joback Method
log10ws	-0.54		Crippen Method
logp	0.137		Crippen Method
mcvol	167.610	ml/mol	McGowan Method
pc	2361.07	kPa	Joback Method
tb	518.10	K	Joback Method
tc	687.27	K	Joback Method
tf	328.98	K	Joback Method
vc	0.627	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	409.83	J/mol×K	518.10	Joback Method
cpg	425.26	J/mol×K	546.29	Joback Method

cpg	440.02	J/mol×K	574.49	Joback Method
cpg	454.12	J/mol×K	602.68	Joback Method
cpg	467.59	J/mol×K	630.88	Joback Method
cpg	480.46	J/mol×K	659.07	Joback Method
cpg	492.73	J/mol×K	687.27	Joback Method

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=C123706&Units=SI
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
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