1,3-Propanediamine, N'-[3-(dimethylamino)propyl]-N,N-dimethyl-

Other names: Bis(3-dimethylamino-1-propyl)amine
Bis-(dimethylaminopropyl)amine
Bis(3-(dimethylamino)propyl)amine
Dipropylamine, 3,3'-bis(dimethylamino)-
Dipropylenetriamine, N,N,N',N'-tetramethyl-
N,N,N',N'-Tetramethyldipropylenetriamine
N'-(3-(Dimethylamino)propyl)-N,N-dimethyl-1,3-propanediamine
2,6,10-Triazaundecane, 2,10-dimethyl-
3,3'-Iminobis(N,N-dimethylpropylamine)
N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine

Inchi: InChI=1S/C10H25N3/c1-12(2)9-5-7-11-8-6-10-13(3)4/h11H,5-10H2,1-4H3

InchiKey: BXYVQNNEFZOBOZ-UHFFFAOYSA-N

Formula: C10H25N3

SMILES: CN(C)CCCNCCCN(C)C

Mol. weight [g/mol]: 187.33

CAS: 6711-48-4

Physical Properties

Property code	Value	Unit	Source
gf	344.27	kJ/mol	Joback Method
hf	-61.20	kJ/mol	Joback Method
hfus	32.80	kJ/mol	Joback Method
hvap	48.38	kJ/mol	Joback Method
log10ws	-0.34		Crippen Method
logp	0.479		Crippen Method
mcvol	181.700	ml/mol	McGowan Method
pc	2125.60	kPa	Joback Method
tb	503.25	K	Joback Method
tc	666.90	K	Joback Method
tf	320.06	K	Joback Method
vc	0.666	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	437.82	J/mol×K	503.25	Joback Method
cpg	454.51	J/mol×K	530.53	Joback Method
cpg	470.48	J/mol×K	557.80	Joback Method
cpg	485.74	J/mol×K	585.08	Joback Method
cpg	500.33	J/mol×K	612.35	Joback Method
cpg	514.26	J/mol×K	639.63	Joback Method
cpg	527.57	J/mol×K	666.90	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	402.70	K	2.70	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6711484&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
tbrp: Boiling point at reduced pressure

tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume