

N,N',N'',N'''-tetramethylethylenediylidenetetraamin

Other names:	Tetrakis(dimethylamino)ethylene
Inchi:	InChI=1S/C10H24N4/c1-11(2)9(12(3)4)10(13(5)6)14(7)8/h1-8H3
InchiKey:	CBXRMKZFYQISIV-UHFFFAOYSA-N
Formula:	C10H24N4
SMILES:	CN(C)C(=C(N(C)C)N(C)C)N(C)C
Mol. weight [g/mol]:	200.32
CAS:	996-70-3

Physical Properties

Property code	Value	Unit	Source
gf	539.56	kJ/mol	Joback Method
hf	118.03	kJ/mol	Joback Method
hfus	31.32	kJ/mol	Joback Method
hvap	53.90 ± 0.50	kJ/mol	NIST Webbook
ie	5.95	eV	NIST Webbook
ie	5.36 ± 0.02	eV	NIST Webbook
ie	5.36	eV	NIST Webbook
log10ws	-0.12		Crippen Method
logp	0.359		Crippen Method
mcvol	187.380	ml/mol	McGowan Method
pc	2400.00 ± 200.00	kPa	NIST Webbook
rhoc	310.50 ± 15.02	kg/m3	NIST Webbook
rinpol	1159.00		NIST Webbook
tb	481.88	K	Joback Method
tc	680.00 ± 6.00	K	NIST Webbook
tf	299.34	K	Joback Method
vc	0.649	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	434.13	J/mol×K	481.88	Joback Method
cpg	452.45	J/mol×K	510.23	Joback Method
cpg	469.83	J/mol×K	538.57	Joback Method

cpg	486.31	J/mol×K	566.92	Joback Method
cpg	501.93	J/mol×K	595.26	Joback Method
cpg	516.73	J/mol×K	623.61	Joback Method
cpg	530.76	J/mol×K	651.95	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	332.20	K	0.10	NIST Webbook

Sources

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=C996703&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
rhoc:	Critical density
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume

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