

N,N'-di-t-Butylethylenediamine

Other names:	N,N'-di-tert-Butyl-ethylenediamine 1,2-Ethanediamine, N,N'-bis(1,1-dimethylethyl)- N,N'-bis(tert-butyl)ethylenediamine
Inchi:	InChI=1S/C10H24N2/c1-9(2,3)11-7-8-12-10(4,5)6/h11-12H,7-8H2,1-6H3
InchiKey:	KGHYGBGIWLNFAV-UHFFFAOYSA-N
Formula:	C10H24N2
SMILES:	CC(C)(C)NCCNC(C)(C)C
Mol. weight [g/mol]:	172.31
CAS:	4062-60-6

Physical Properties

Property code	Value	Unit	Source
gf	217.78	kJ/mol	Joback Method
hf	-160.29	kJ/mol	Joback Method
hfus	17.03	kJ/mol	Joback Method
hvap	48.13	kJ/mol	Joback Method
log10ws	-2.61		Crippen Method
logp	1.763		Crippen Method
mcvol	171.720	ml/mol	McGowan Method
pc	2237.64	kPa	Joback Method
tb	522.08	K	Joback Method
tc	711.25	K	Joback Method
tf	312.62	K	Joback Method
vc	0.643	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	428.23	J/mol×K	522.08	Joback Method
cpg	445.91	J/mol×K	553.61	Joback Method
cpg	462.58	J/mol×K	585.14	Joback Method
cpg	478.29	J/mol×K	616.66	Joback Method
cpg	493.10	J/mol×K	648.19	Joback Method
cpg	507.04	J/mol×K	679.72	Joback Method

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=C4062606&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
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

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