

N,N-dimethyl-N'-phenylethylenediamine

Inchi:	InChI=1S/C10H16N2/c1-12(2)9-8-11-10-6-4-3-5-7-10/h3-7,11H,8-9H2,1-2H3
InchiKey:	FRCVOKAWJJJIHQ-UHFFFAOYSA-N
Formula:	C10H16N2
SMILES:	CN(C)CCNc1ccccc1
Mol. weight [g/mol]:	164.25
CAS:	6711-46-2

Physical Properties

Property code	Value	Unit	Source
gf	345.90	kJ/mol	Joback Method
hf	107.80	kJ/mol	Joback Method
hfus	23.82	kJ/mol	Joback Method
hvap	48.61	kJ/mol	Joback Method
log10ws	-1.31		Crippen Method
logp	1.660		Crippen Method
mcvol	147.960	ml/mol	McGowan Method
pc	2966.57	kPa	Joback Method
rinpol	1377.40		NIST Webbook
rinpol	1377.40		NIST Webbook
tb	517.49	K	Joback Method
tc	721.03	K	Joback Method
tf	314.01	K	Joback Method
vc	0.540	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	338.59	J/molxK	517.49	Joback Method
cpg	354.49	J/molxK	551.41	Joback Method
cpg	369.44	J/molxK	585.34	Joback Method
cpg	383.48	J/molxK	619.26	Joback Method
cpg	396.66	J/molxK	653.18	Joback Method
cpg	409.01	J/molxK	687.11	Joback Method
cpg	420.58	J/molxK	721.03	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C6711462&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
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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