Benzenamine, N,N-dimethyl-4-nitroso-

Other names:	Aniline, N,N-dimethyl-p-nitroso-
	p-(Dimethylamino)nitrosobenzene
	p-(N,N-Dimethylamino)nitrosobenzene
	p-Nitroso-N,N-dimethylaniline
	Accelerine
	Dimethyl(p-nitrosophenyl)amine
	N,N-Dimethyl-p-nitrosoaniline
	N,N-Dimethyl-4-nitrosoaniline
	NDMA
	Ultra Brilliant Blue P
	4-(Dimethylamino)nitrosobenzene
	4-Nitroso-N,N-dimethylaniline
	4-Nitrosodimethylaniline
	p-Nitroso dimethylaniline
	p-Nitrosodimethylanilide
	NCI-C01821
	Dimethyl-p-nitrosoaniline
	Paranitrosodimethylanilide
	UN 1369
	Vulcaniline
	N,N-Dimethyl-4-nitrosobenzenamine
	NSC 2775
Inchi:	InChI=1S/C8H10N2O/c1-10(2)8-5-3-7(9-11)4-6-8/h3-6H,1-2H3
InchiKey:	CMEWLCATCRTSGF-UHFFFAOYSA-N
Formula:	C8H10N2O
SMILES:	CN(C)c1ccc(N=O)cc1
Mol. weight [g/mol]:	150.18
CAS:	138-89-6

Physical Properties

Property code	Value	Unit	Source
chs	-4680.20 ± 1.20	kJ/mol	NIST Webbook
chs	-4703.20	kJ/mol	NIST Webbook
hf	185.00 ± 2.30	kJ/mol	NIST Webbook
hfs	103.00 ± 1.60	kJ/mol	NIST Webbook
hsub	82.00 ± 1.70	kJ/mol	NIST Webbook

hsub	82.00 ± 1.70	kJ/mol	NIST Webbook
hvap	47.48	kJ/mol	Joback Method
ie	7.20	eV	NIST Webbook
ie	7.80 ± 0.10	eV	NIST Webbook
log10ws	-2.14		Crippen Method
logp	2.151		Crippen Method
mcvol	121.350	ml/mol	McGowan Method
pc	3501.28	kPa	Joback Method
tb	489.94	K	Joback Method
tc	696.16	K	Joback Method
tf	358.90 ± 0.70	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	206.70	J/mol×K	293.00	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=C138896&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Legend

chs: Standard solid enthalpy of combustion
cps: Solid phase heat capacity
hf: Enthalpy of formation at standard conditions
hfs: Solid phase enthalpy of formation at standard conditions
hsub: Enthalpy of sublimation 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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point