

p-Dimethylamino-m-nitroazobenzene

Other names:

Aniline, N,N-dimethyl-p-((m-nitrophenyl)azo)-
Benzenamine, N,N-dimethyl-4-((3-nitrophenyl)azo)-
N,N-Dimethyl-p-((m-nitrophenyl)azo)aniline
N,N-Dimethyl-4-((3-nitrophenyl)azo)aniline
3'-Nitro-4-dimethylaminoazobenzol (3'NO₂-DAB)
3'-Nitro-4-((dimethylamino)azo)benzene
4-Dimethylamino-3' nitroazobenzene
Azobenzene, 4-dimethylamino-3'-nitro-
3-Nitro-4'-(N,N-dimethylamino)-azobenzene
3-Nitro-4'-dimethylaminoazobenzene
NSC 204512

Inchi: InChI=1S/C14H14N4O2/c1-17(2)13-8-6-11(7-9-13)15-16-12-4-3-5-14(10-12)18(19)20/h3**InchiKey:** BISWHFCOHYEFQW-UHFFFAOYSA-N**Formula:** C₁₄H₁₄N₄O₂**SMILES:** CN(C)c1ccc(N=Nc2ccc([N+](=O)[O-])c2)cc1**Mol. weight [g/mol]:** 270.29**CAS:** 3837-55-6

Physical Properties

Property code	Value	Unit	Source
hf	221.82	kJ/mol	Joback Method
hvap	77.94	kJ/mol	Joback Method
log10ws	-4.07		Crippen Method
logp	4.076		Crippen Method
mcvol	203.660	ml/mol	McGowan Method
pc	2100.34	kPa	Joback Method
tb	896.52	K	Joback Method
tc	1166.66	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	133.90 ± 3.80	kJ/mol	400.00	NIST Webbook
hsubt	133.10 ± 3.80	kJ/mol	401.00	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.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=C3837556&Units=SI

Legend

hf:	Enthalpy of formation at standard conditions
hsubt:	Enthalpy of sublimation at a given temperature
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

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