Benzenamine, N,N-dimethyl-4-[(4-nitrophenyl)azo]-

Other names: 4-Nitro-4'-(N,N-dimethylamino)-azobenzene
Inchi: InChI=1S/C14H14N4O2/c1-17(2)13-7-3-11(4-8-13)15-16-12-5-9-14(10-6-12)18(19)20/h3
InchiKey: LSFRFLVWCKLQTO-UHFFFAOYSA-N
Formula: C14H14N4O2
SMILES: CN(C)c1ccc(N=Nc2ccc([N+](=O)[O-])cc2)cc1
Mol. weight [g/mol]: 270.29
CAS: 2491-74-9

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	134.30 ± 7.50	kJ/mol	419.00	NIST Webbook
hsubt	135.10 ± 0.90	kJ/mol	421.00	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=C2491749&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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