

Diazeno, bis(4-methoxyphenyl)-, 1-oxide

Other names:	Azoxybenzene, 4,4'-dimethoxy- p-Azoxyanisole p-Azoxydianisole p,p'-Azoxyanisole p,p'-Azoxydianisole 4,4'-Azoxyanisole 4,4'-Azoxydianisole 4,4'-Dimethoxyazoxybenzene Azoxy-bis(4-methoxybenzene) p,p'-Dimethoxyazoxybenzene PAA Diazeno, 1,2-bis(4-methoxyphenyl)-, 1-oxide NSC 7959
Inchi:	InChI=1S/C14H14N2O3/c1-18-13-7-3-11(4-8-13)15-16(17)12-5-9-14(19-2)10-6-12/h3-10
InchiKey:	KAEZRSFWWCTVNP-UHFFFAOYSA-N
Formula:	C14H14N2O3
SMILES:	COc1ccc(N=[N+])([O-])c2ccc(OC)cc2)cc1
Mol. weight [g/mol]:	258.27
CAS:	1562-94-3

Physical Properties

Property code	Value	Unit	Source
chs	-7408.60 ± 1.90	kJ/mol	NIST Webbook
hf	33.40 ± 4.50	kJ/mol	NIST Webbook
hfs	-101.40 ± 2.60	kJ/mol	NIST Webbook
hsub	134.80 ± 3.70	kJ/mol	NIST Webbook
hsub	134.80 ± 3.70	kJ/mol	NIST Webbook
ie	8.06	eV	NIST Webbook
ie	8.00	eV	NIST Webbook
log10ws	-3.64		Crippen Method
logp	3.629		Crippen Method
mcvol	193.870	ml/mol	McGowan Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpl	569.00	J/mol×K	400.00	NIST Webbook
cps	380.30	J/mol×K	368.00	NIST Webbook
hfust	29.30	kJ/mol	391.70	NIST Webbook
hfust	20.63	kJ/mol	377.20	NIST Webbook
hvapt	73.70	kJ/mol	406.50	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1562943&Units=SI

Legend

chs:	Standard solid enthalpy of combustion
cpl:	Liquid phase heat capacity
cps:	Solid phase heat capacity
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase enthalpy of formation at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hsub:	Enthalpy of sublimation at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume

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