AZOXYBENZENE

Other names:	Diazene, diphenyl-, 1-oxide
	Azobenzene, oxide
	Azoxybenzide
	Diphenyldiazene N-oxide
	Azossibenzene
	Azoxybenzeen
	Azoxybenzol
	Benzene, azoxydi-
	Fenazox
	Fentoxan
	Diazene, 1,2-diphenyl-, 1-oxide
	NSC 1796
Inchi:	InChI=1S/C12H10N2O/c15-14(12-9-5-2-6-10-12)13-11-7-3-1-4-8-11/h1-10H
InchiKey:	GAUZCKBSTZFWCT-UHFFFAOYSA-N
Formula:	C12H10N2O
SMILES:	[O-][N+](=Nc1ccccc1)c1ccccc1
Mol. weight [g/mol]:	198.23

Physical Properties

Property code	Value	Unit	Source
chs	-6450.50	kJ/mol	NIST Webbook
chs	-6450.50	kJ/mol	NIST Webbook
chs	-6394.70 ± 1.50	kJ/mol	NIST Webbook
hf	342.00 ± 2.40	kJ/mol	NIST Webbook
hfs	243.40 ± 2.20	kJ/mol	NIST Webbook
hfs	299.00	kJ/mol	NIST Webbook
hfs	299.00	kJ/mol	NIST Webbook
hsub	98.60 ± 0.90	kJ/mol	NIST Webbook
hvap	76.94	kJ/mol	Cheméo Relay (1.0)
ie	8.55	eV	NIST Webbook
ie	8.40	eV	NIST Webbook
ie	8.35	eV	NIST Webbook
ie	8.35	eV	NIST Webbook
ie	8.10	eV	NIST Webbook
log10ws	-3.67		Cheméo Relay (1.0)
logp	3.612		Crippen Method
mcvol	153.950	ml/mol	McGowan Method

pc	3826.23	kPa	Cheméo Relay (1.0, beta)
rinpol	1846.00		NIST Webbook
tb	581.49	K	Cheméo Relay (1.0)
tc	878.14	K	Cheméo Relay (1.0)
tf	307.75 ± 0.50	K	NIST Webbook

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C495487&Units=SI

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Legend

chs: Standard solid enthalpy of combustion
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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point