Diazene, dimethyl-

Other names:	Azomethane
	(CH3N)2
	1,2-Dimethyldiazene
	Dimethyldiazene
	(E)-Dimethyldiazene
Inchi:	InChI=1S/C2H6N2/c1-3-4-2/h1-2H3
InchiKey:	JCCAVOLDXDEODY-UHFFFAOYSA-N
Formula:	C2H6N2
SMILES:	CN=NC
Mol. weight [g/mol]:	58.08
CAS:	503-28-6

Physical Properties

Property code	Value	Unit	Source
affp	865.10	kJ/mol	NIST Webbook
basg	834.40	kJ/mol	NIST Webbook
hf	-37.39	kJ/mol	Joback Method
hvap	26.72	kJ/mol	Joback Method
ie	8.70 ± 0.10	eV	NIST Webbook
ie	8.95 ± 0.05	eV	NIST Webbook
ie	8.45 ± 0.05	eV	NIST Webbook
ie	8.20	eV	NIST Webbook
ie	8.70 ± 0.10	eV	NIST Webbook
ie	9.00	eV	NIST Webbook
ie	8.30	eV	NIST Webbook
ie	8.70 ± 0.20	eV	NIST Webbook
log10ws	0.08		Crippen Method
logp	0.698		Crippen Method
mcvol	54.700	ml/mol	McGowan Method
pc	3577.07	kPa	Joback Method
rinpol	396.00		NIST Webbook
rinpol	386.80		NIST Webbook
tb	274.70	K	NIST Webbook
tb	275.00	K	NIST Webbook
tc	602.85	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	26.40	kJ/mol	234.00	NIST Webbook
hvapt	25.30	kJ/mol	222.50	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
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=C4143413&Units=SI

Legend

affp:	Proton affinity
basg:	Gas basicity
hf:	Enthalpy of formation at standard conditions
hvap:	Enthalpy of vaporization 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
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature