(E)-Diazene

Inchi: InChI=1S/H2N2/c1-2/h1-2H/b2-1+
InchiKey: RAABOESOVLLHRU-OWOJBTEDSA-N
Formula: H2N2
SMILES: N=N
Mol. weight [g/mol]: 30.03
CAS: 15626-43-4

Physical Properties

Property code	Value	Unit	Source
gf	293.20	kJ/mol	Joback Method
hf	255.69	kJ/mol	Joback Method
hvap	39.64	kJ/mol	Joback Method
ie	9.65 ± 0.08	eV	NIST Webbook
log10ws	-2.58		Crippen Method
logp	0.596		Crippen Method
mcvol	26.520	ml/mol	McGowan Method
tb	364.16	K	Joback Method
tf	260.32	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	30.39	J/mol×K	364.16	Joback Method
cpg	-7.67	J/mol×K	100.12	Joback Method
cpg	-7.67	J/mol×K	100.12	Joback Method
cpg	-7.67	J/mol×K	100.12	Joback Method
cpg	-7.67	J/mol×K	100.12	Joback Method
cpg	-7.67	J/mol×K	100.12	Joback Method
cpg	-7.67	J/mol×K	100.12	Joback Method

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=C15626434&Units=SI

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation 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
tb:	Normal Boiling Point Temperature
tf:	Normal melting (fusion) point