Aziridine, 2,2-dimethyl-

Other names: 2,2-Dimethylaziridine
2,2-Dimethylethylenimine
Inchi: InChI=1S/C4H9N/c1-4(2)3-5-4/h5H,3H2,1-2H3
InchiKey: FGRJGEWVJCCOJJ-UHFFFAOYSA-N
Formula: C4H9N
SMILES: CC1(C)CN1
Mol. weight [g/mol]: 71.12
CAS: 2658-24-4

Physical Properties

Property code	Value	Unit	Source
gf	125.77	kJ/mol	Joback Method
hf	-0.04	kJ/mol	Joback Method
hfus	7.54	kJ/mol	Joback Method
hvap	30.02	kJ/mol	Joback Method
ie	9.29 ± 0.02	eV	NIST Webbook
ie	8.94	eV	NIST Webbook
ie	8.94	eV	NIST Webbook
log10ws	-0.69		Crippen Method
logp	0.368		Crippen Method
mcvol	66.340	ml/mol	McGowan Method
pc	5087.49	kPa	Joback Method
rinpol	629.00		NIST Webbook
rinpol	629.00		NIST Webbook
tb	346.45	K	Joback Method
tc	546.11	K	Joback Method
tf	281.71	K	Joback Method
vc	0.252	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	108.01	J/mol×K	346.45	Joback Method
cpg	118.94	J/mol×K	379.73	Joback Method

cpg	128.92	J/mol×K	413.00	Joback Method
cpg	138.04	J/mol×K	446.28	Joback Method
cpg	146.38	J/mol×K	479.56	Joback Method
cpg	154.04	J/mol×K	512.84	Joback Method
cpg	161.10	J/mol×K	546.11	Joback Method

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=C2658244&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion 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
vc:	Critical Volume