4,4-Dimethyl-2-imidazoline

Inchi: InChI=1S/C5H10N2/c1-5(2)3-6-4-7-5/h4H,3H2,1-2H3,(H,6,7)
InchiKey: OVABIFHEPZPSCK-UHFFFAOYSA-N
Formula: C5H10N2
SMILES: CC1(C)CN=CN1
Mol. weight [g/mol]: 98.15
CAS: 2305-59-1

Physical Properties

Property code	Value	Unit	Source
affp	988.10	kJ/mol	NIST Webbook
basg	955.70	kJ/mol	NIST Webbook
gf	256.73	kJ/mol	Joback Method
hf	95.75	kJ/mol	Joback Method
hfus	12.29	kJ/mol	Joback Method
hvap	39.09	kJ/mol	Joback Method
log10ws	-0.77		Crippen Method
logp	0.396		Crippen Method
mcvol	86.110	ml/mol	McGowan Method
pc	5022.80	kPa	Joback Method
tb	430.73	K	Joback Method
tc	664.32	K	Joback Method
tf	358.24	K	Joback Method
vc	0.327	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	175.45	J/mol×K	430.73	Joback Method
cpg	189.57	J/mol×K	469.66	Joback Method
cpg	202.66	J/mol×K	508.59	Joback Method
cpg	214.81	J/mol×K	547.52	Joback Method
cpg	226.13	J/mol×K	586.46	Joback Method
cpg	236.72	J/mol×K	625.39	Joback Method
cpg	246.70	J/mol×K	664.32	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	355.70	K	2.00	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=C2305591&Units=SI

Legend

affp:	Proton affinity
basg:	Gas basicity
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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume