Quinoline, 5,6,7,8-tetrahydro-

Other names: 5,6,7,8-Tetrahydroquinoline
2,3-Cyclohexenopyridine
Inchi: InChI=1S/C9H11N/c1-2-6-9-8(4-1)5-3-7-10-9/h3,5,7H,1-2,4,6H2
InchiKey: YQDGQEKUTLYWJU-UHFFFAOYSA-N
Formula: C9H11N
SMILES: c1cnc2c(c1)CCCC2
Mol. weight [g/mol]: 133.19
CAS: 10500-57-9

Physical Properties

Property code	Value	Unit	Source
affp	966.00	kJ/mol	NIST Webbook
basg	934.10	kJ/mol	NIST Webbook
chl	-5127.00 ± 1.20	kJ/mol	NIST Webbook
hf	71.00 ± 1.20	kJ/mol	NIST Webbook
hfl	13.40 ± 1.20	kJ/mol	NIST Webbook
hvap	57.60 ± 0.20	kJ/mol	NIST Webbook
hvap	57.56	kJ/mol	NIST Webbook
hvap	57.60	kJ/mol	NIST Webbook
ie	9.10	eV	NIST Webbook
log10ws	-2.74		Crippen Method
logp	1.960		Crippen Method
mcvol	113.030	ml/mol	McGowan Method
rinpol	227.19		NIST Webbook
rinpol	1257.00		NIST Webbook
rinpol	226.54		NIST Webbook
rinpol	227.19		NIST Webbook
ripol	1832.00		NIST Webbook
sl	248.73	J/mol×K	NIST Webbook
sl	248.69	J/mol×K	NIST Webbook
tb	491.20	K	NIST Webbook
tb	495.20	K	NIST Webbook
tf	222.63	K	NIST Webbook
tt	222.63 ± 0.01	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpl	217.41	J/mol×K	298.15	NIST Webbook
cpl	217.33	J/mol×K	298.15	NIST Webbook
hfust	9.08	kJ/mol	222.70	NIST Webbook
hfust	9.08	kJ/mol	222.70	NIST Webbook
hvapt	46.20 ± 0.40	kJ/mol	423.50	NIST Webbook
hvapt	43.50 ± 0.50	kJ/mol	423.50	NIST Webbook
hvapt	56.10 ± 0.10	kJ/mol	423.50	NIST Webbook
hvapt	53.60 ± 0.10	kJ/mol	423.50	NIST Webbook
hvapt	51.10 ± 0.10	kJ/mol	423.50	NIST Webbook
hvapt	48.70 ± 0.30	kJ/mol	423.50	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	366.70	K	1.60	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C10500579&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Legend

affp: Proton affinity
basg: Gas basicity
chl: Standard liquid enthalpy of combustion
cpl: Liquid phase heat capacity
hf: Enthalpy of formation at standard conditions

hfl:	Liquid phase enthalpy of formation at standard conditions
hfust:	Enthalpy of fusion at a given temperature
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
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
sl:	Liquid phase molar entropy at standard conditions
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tf:	Normal melting (fusion) point
tt:	Triple Point Temperature