2-Naphthalenol, 5,6,7,8-tetrahydro-

Other names:	2-Hydroxy-5,6,7,8-tetrahydronaphthalene
	2-Naphthol, 5,6,7,8-tetrahydro-
	5,6,7,8-Tetrahydro-2-hydroxynaphthalene
	5,6,7,8-Tetrahydro-2-naphthol
	5,6,7,8-Tetrahydro-«beta»-naphthol
	5,6,7,8-Tetrahydro-Â«betaÂ»-naphthol
	6-Hydroxytetralin
	6-Tetralinol
	NSC 65604
	Tetrahydro-«beta»-naphthol
	Tetrahydro-Â«betaÂ»-naphthol
	ac-«beta»-Tetralol
	ac-Â«betaÂ»-Tetralol
Inchi:	InChI=1S/C10H12O/c11-10-6-5-8-3-1-2-4-9(8)7-10/h5-7,11H,1-4H2
InchiKey:	UMKXSOXZAXIOPJ-UHFFFAOYSA-N
Formula:	C10H12O
SMILES:	Oc1ccc2c(c1)CCCC2
Mol. weight [g/mol]:	148.20
CAS:	1125-78-6

Physical Properties

Property code	Value	Unit	Source
gf	37.84	kJ/mol	Joback Method
hf	-115.00	kJ/mol	Joback Method
hfus	16.06	kJ/mol	Joback Method
hvap	54.20	kJ/mol	Joback Method
log10ws	-1.99		Aqueous Solubility Prediction Method
log10ws	-1.99		Estimated Solubility Method
logp	2.271		Crippen Method
mcvol	123.010	ml/mol	McGowan Method
pc	4299.92	kPa	Joback Method
tb	548.70	K	NIST Webbook
tc	801.84	K	Joback Method
tf	332.65	K	Aqueous Solubility Prediction Method
tf	333.00 ± 3.00	K	NIST Webbook

vc	0.404	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	295.09	J/mol×K	556.16	Joback Method
cpg	309.74	J/mol×K	597.11	Joback Method
cpg	323.17	J/mol×K	638.05	Joback Method
cpg	335.52	J/mol×K	679.00	Joback Method
cpg	346.93	J/mol×K	719.95	Joback Method
cpg	357.55	J/mol×K	760.89	Joback Method
cpg	367.52	J/mol×K	801.84	Joback Method
dvisc	0.0021372	Pa×s	371.78	Joback Method
dvisc	0.0010013	Pa×s	402.51	Joback Method
dvisc	0.0005224	Pa×s	433.24	Joback Method
dvisc	0.0002971	Pa×s	463.97	Joback Method
dvisc	0.0001812	Pa×s	494.70	Joback Method
dvisc	0.0001171	Pa×s	525.43	Joback Method
dvisc	0.0000794	Pa×s	556.16	Joback Method

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method

Aqueous Solubility Prediction Method: http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa

Estimated Solubility Method: http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1125786&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity

dvisc: Dynamic viscosity

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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume