1,2,3,4-Tetrahydro-2-naphthol

Other names:	2-Naphthalenol, 1,2,3,4-tetrahydro- «beta»-Tetralol 2-Hydroxytetralin 2-Naphthol, 1,2,3,4-tetrahydro- 1,2,3,4-Tetrahydro-2-naphthalenol Ac-«beta»-tetralol Ac-tetrahydro-«beta»-naphthol 1,2,3,4-Tetrahydronaphthalen-2-ol 2-Tetralinol NSC 44875
Inchi:	InChI=1S/C10H12O/c11-10-6-5-8-3-1-2-4-9(8)7-10/h1-4,10-11H,5-7H2
InchiKey:	JWQYZECMEPOAPF-UHFFFAOYSA-N
Formula:	C10H12O
SMILES:	OC1CCc2ccccc2C1
Mol. weight [g/mol]:	148.20
CAS:	530-91-6

Physical Properties

Property code	Value	Unit	Source
gf	47.93	kJ/mol	Joback Method
hf	-110.26	kJ/mol	Joback Method
hfus	15.43	kJ/mol	Joback Method
hvap	57.56	kJ/mol	Joback Method
ie	8.67 ± 0.02	eV	NIST Webbook
log10ws	-2.35		Crippen Method
logp	1.536		Crippen Method
mcvol	123.010	ml/mol	McGowan Method
pc	3834.03	kPa	Joback Method
tb	563.05	K	Joback Method
tc	777.80	K	Joback Method
tf	316.64	K	Joback Method
vc	0.456	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	297.13	J/mol×K	563.05	Joback Method
cpg	356.76	J/mol×K	742.01	Joback Method
cpg	346.43	J/mol×K	706.21	Joback Method
cpg	335.35	J/mol×K	670.42	Joback Method
cpg	323.48	J/mol×K	634.63	Joback Method
cpg	310.75	J/mol×K	598.84	Joback Method
cpg	366.40	J/mol×K	777.80	Joback Method
dvisc	0.0001702	Pa×s	563.05	Joback Method
dvisc	0.0002465	Pa×s	521.98	Joback Method
dvisc	0.0003804	Pa×s	480.91	Joback Method
dvisc	0.0006365	Pa×s	439.84	Joback Method
dvisc	0.0011841	Pa×s	398.78	Joback Method
dvisc	0.0025404	Pa×s	357.71	Joback Method
dvisc	0.0066435	Pa×s	316.64	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=C530916&Units=SI

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
ie: Ionization energy
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