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

Other names: 1-Naphthol, 5,6,7,8-tetrahydro-
Tetrahydro-«alpha»-naphthol
5-Hydroxytetralin
5,6,7,8-Tetrahydro-«alpha»-naphthol
5,6,7,8-Tetrahydro-1-naphthol
5,6,7,8-Tetrahydronaphthalenol
Naphthalenol, 5,6,7,8-tetrahydro-
Inchi: InChI=1S/C10H12O/c11-10-7-3-5-8-4-1-2-6-9(8)10/h3,5,7,11H,1-2,4,6H2
InchiKey: SCWNNOCLLOHZIG-UHFFFAOYSA-N
Formula: C10H12O
SMILES: Oc1cccc2c1CCCC2
Mol. weight [g/mol]: 148.20
CAS: 529-35-1

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	-2.52		Crippen Method
logp	2.271		Crippen Method
mcvol	123.010	ml/mol	McGowan Method
pc	4299.92	kPa	Joback Method
rinpol	1440.80		NIST Webbook
rinpol	1450.90		NIST Webbook
rinpol	1447.20		NIST Webbook
rinpol	1440.80		NIST Webbook
rinpol	1446.10		NIST Webbook
rinpol	1447.20		NIST Webbook
rinpol	1447.20		NIST Webbook
rinpol	1450.90		NIST Webbook
rinpol	1446.10		NIST Webbook
rinpol	1447.20		NIST Webbook
tb	556.16	K	Joback Method
tc	801.84	K	Joback Method
tf	342.00 ± 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

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	537.70	K	94.00	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=C529351&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
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume