1-Naphthalenol, acetate

Other names:	1-Naphthol, acetate
	«alpha»-Naphthyl acetate
	A-naphthyl acetate
	Naphthalene, 1-acetoxy-
	1-Acetoxynaphthalene
	1-Naphthyl acetate
Inchi:	InChI=1S/C12H10O2/c1-9(13)14-12-8-4-6-10-5-2-3-7-11(10)12/h2-8H,1H3
InchiKey:	VGKONPUVOVVNSU-UHFFFAOYSA-N
Formula:	C12H10O2
SMILES:	CC(=O)Oc1cccc2ccccc12
Mol. weight [g/mol]:	186.21
CAS:	830-81-9

Physical Properties

Property code	Value	Unit	Source
chs	-5790.30 ± 5.80	kJ/mol	NIST Webbook
chs	-5846.30 ± 1.10	kJ/mol	NIST Webbook
chs	-5862.70 ± 7.30	kJ/mol	NIST Webbook
gf	25.67	kJ/mol	Joback Method
hf	-119.68	kJ/mol	Joback Method
hfs	-305.00 ± 1.10	kJ/mol	NIST Webbook
hfus	20.29	kJ/mol	Joback Method
hsub	95.10 ± 0.60	kJ/mol	NIST Webbook
hvap	56.04	kJ/mol	Joback Method
log10ws	-3.59		Crippen Method
logp	2.765		Crippen Method
mcvol	144.160	ml/mol	McGowan Method
pc	3217.33	kPa	Joback Method
tb	600.89	K	Joback Method
tc	836.14	K	Joback Method
tf	319.00 ± 0.50	K	NIST Webbook
vc	0.545	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	393.88	J/mol×K	796.93	Joback Method
cpg	402.88	J/mol×K	836.14	Joback Method
cpg	336.63	J/mol×K	600.89	Joback Method
cpg	349.90	J/mol×K	640.10	Joback Method
cpg	362.21	J/mol×K	679.31	Joback Method
cpg	373.60	J/mol×K	718.51	Joback Method
cpg	384.14	J/mol×K	757.72	Joback Method
dvisc	0.0002966	Pa×s	600.89	Joback Method
dvisc	0.0003519	Pa×s	562.21	Joback Method
dvisc	0.0014170	Pa×s	368.80	Joback Method
dvisc	0.0009648	Pa×s	407.48	Joback Method
dvisc	0.0007022	Pa×s	446.16	Joback Method
dvisc	0.0005377	Pa×s	484.85	Joback Method
dvisc	0.0004282	Pa×s	523.53	Joback Method
hfust	20.21	kJ/mol	319.20	NIST Webbook
hfust	20.21	kJ/mol	319.20	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=C830819&Units=SI

Legend

chs: Standard solid enthalpy of combustion
cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfs: Solid phase enthalpy of formation at standard conditions

hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
hsub:	Enthalpy of sublimation 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