1(2H)-Naphthalenone, 3,4-dihydro-4-methyl-

Other names:	4-Methyl-«alpha»-tetralone
	4-Methyl-1-tetralone
	3,4-Dihydro-4-methyl-1(2H)-naphthalenone
	1,2,3,4-tetrahydro-4-methylnaphthalen-1-one
Inchi:	InChI=1S/C11H12O/c1-8-6-7-11(12)10-5-3-2-4-9(8)10/h2-5,8H,6-7H2,1H3
InchiKey:	SRLHDEROUKFEMJ-UHFFFAOYSA-N
Formula:	C11H12O
SMILES:	CC1CCC(=O)c2ccccc21
Mol. weight [g/mol]:	160.21
CAS:	19832-98-5

Physical Properties

Property code	Value	Unit	Source
gf	70.58	kJ/mol	Joback Method
hf	-116.37	kJ/mol	Joback Method
hfus	13.44	kJ/mol	Joback Method
hvap	47.35	kJ/mol	Joback Method
log10ws	-3.21		Crippen Method
logp	2.767		Crippen Method
mcvol	132.800	ml/mol	McGowan Method
pc	3199.16	kPa	Joback Method
tb	561.57	K	Joback Method
tc	805.91	K	Joback Method
tf	335.31	K	Joback Method
vc	0.499	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	316.27	J/mol×K	561.57	Joback Method
cpg	333.21	J/mol×K	602.29	Joback Method
cpg	349.06	J/mol×K	643.02	Joback Method
cpg	363.84	J/mol×K	683.74	Joback Method
cpg	377.60	J/mol×K	724.46	Joback Method

cpg	390.35	J/mol×K	765.19	Joback Method
cpg	402.13	J/mol×K	805.91	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	368.20	K	0.10	NIST Webbook

Sources

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=C19832985&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity
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
tbrp: Boiling point at reduced pressure
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume