

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

Other names:	2-Methyl-1-tetralone 2-Methyltetralone 2-Methyl-1-oxo-1,2,3,4-tetrahydronaphthalene 1,2,3,4-tetrahydro-2-methylnaphthalen-1-one
Inchi:	InChI=1S/C11H12O/c1-8-6-7-9-4-2-3-5-10(9)11(8)12/h2-5,8H,6-7H2,1H3
InchiKey:	GANIBVZSZGNMNB-UHFFFAOYSA-N
Formula:	C11H12O
SMILES:	CC1CCc2ccccc2C1=O
Mol. weight [g/mol]:	160.21
CAS:	1590-08-5

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	-3.01		Crippen Method
logp	2.452		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/molxK	561.57	Joback Method
cpg	333.21	J/molxK	602.29	Joback Method
cpg	349.06	J/molxK	643.02	Joback Method
cpg	363.84	J/molxK	683.74	Joback Method
cpg	377.60	J/molxK	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	402.20	K	1.60	NIST Webbook

Sources

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=C1590085&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

Latest version available from:

<https://www.chemeo.com/cid/65-218-8/1-2H-Naphthalenone-3-4-dihydro-2-methyl.pdf>

Generated by Cheméo on 2024-04-29 02:30:44.462042354 +0000 UTC m=+16647093.382619670.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.