Acenaphthylene, 1,2,2a,3,4,5-hexahydro-

Other names:	Acenaphthene, 2a,3,4,5-tetrahydro-
	(1-4)-Tetrahydroacenaphthene
	Tetraphthen
	Tetraphthene
	2a,3,4,5-Tetrahydroacenaphthene
	Tetrahydroacenaphthene
	1,2,2a,3,4,5-Hexahydroacenaphthylene
	2a,3,4,5-Tetrahydroacenaphthalene
Inchi:	InChI=1S/C12H14/c1-3-9-4-2-6-11-8-7-10(5-1)12(9)11/h1,3,5,11H,2,4,6-8H2
InchiKey:	BDAGIAXQQBRORQ-UHFFFAOYSA-N
Formula:	C12H14
SMILES:	c1cc2c3c(c1)CCC3CCC2
Mol. weight [g/mol]:	158.24
CAS:	480-72-8

Physical Properties

Property code	Value	Unit	Source
gf	272.52	kJ/mol	Joback Method
hf	88.52	kJ/mol	Joback Method
hfus	15.30	kJ/mol	Joback Method
hvap	46.04	kJ/mol	Joback Method
log10ws	-3.63		Crippen Method
logp	3.053		Crippen Method
mcvol	134.460	ml/mol	McGowan Method
pc	3170.40	kPa	Joback Method
rinpol	1357.00		NIST Webbook
rinpol	1360.00		NIST Webbook
rinpol	232.70		NIST Webbook
rinpol	1359.80		NIST Webbook
rinpol	1378.00		NIST Webbook
rinpol	1359.80		NIST Webbook
rinpol	232.70		NIST Webbook
rinpol	1360.00		NIST Webbook
tb	528.75	K	Joback Method
tc	763.72	K	Joback Method
tf	316.58	K	Joback Method
vc	0.514	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	317.67	J/mol×K	528.75	Joback Method
cpg	335.48	J/mol×K	567.91	Joback Method
cpg	351.91	J/mol×K	607.07	Joback Method
cpg	367.08	J/mol×K	646.23	Joback Method
cpg	381.09	J/mol×K	685.39	Joback Method
cpg	394.07	J/mol×K	724.56	Joback Method
cpg	406.15	J/mol×K	763.72	Joback Method
dvisc	0.0016752	Pa×s	316.58	Joback Method
dvisc	0.0013903	Pa×s	351.94	Joback Method
dvisc	0.0011939	Pa×s	387.30	Joback Method
dvisc	0.0010516	Pa×s	422.66	Joback Method
dvisc	0.0009447	Pa×s	458.03	Joback Method
dvisc	0.0008617	Pa×s	493.39	Joback Method
dvisc	0.0007958	Pa×s	528.75	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C480728&Units=SI
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

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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume