1,4,5,8,9,10-Hexahydroanthracene

Other names: Anthracene, 1,4,5,8,9,10-hexahydro-
Inchi: InChI=1S/C14H16/c1-2-6-12-10-14-8-4-3-7-13(14)9-11(12)5-1/h1-4H,5-10H2
InchiKey: LNRAWXJRDXDHJN-UHFFFAOYSA-N
Formula: C14H16
SMILES: C1=CCC2=C(C1)CC1=C(CC=CC1)C2
Mol. weight [g/mol]: 184.28
CAS: 5910-28-1

Physical Properties

Property code	Value	Unit	Source
gf	293.20	kJ/mol	Joback Method
hf	101.57	kJ/mol	Joback Method
hfus	16.04	kJ/mol	Joback Method
hvap	52.10	kJ/mol	Joback Method
ie	8.16	eV	NIST Webbook
log10ws	-4.78		Crippen Method
logp	4.073		Crippen Method
mcvol	158.340	ml/mol	McGowan Method
pc	2878.12	kPa	Joback Method
tb	591.86	K	Joback Method
tc	838.03	K	Joback Method
tf	349.60	K	Joback Method
vc	0.598	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	395.20	J/mol×K	591.86	Joback Method
cpg	475.95	J/mol×K	797.00	Joback Method
cpg	462.22	J/mol×K	755.97	Joback Method
cpg	447.40	J/mol×K	714.95	Joback Method
cpg	431.37	J/mol×K	673.92	Joback Method
cpg	414.02	J/mol×K	632.89	Joback Method
cpg	488.74	J/mol×K	838.03	Joback Method

dvisc	0.0004386	Pa×s	591.86	Joback Method
dvisc	0.0005153	Pa×s	551.48	Joback Method
dvisc	0.0006210	Pa×s	511.11	Joback Method
dvisc	0.0007728	Pa×s	470.73	Joback Method
dvisc	0.0010020	Pa×s	430.35	Joback Method
dvisc	0.0013709	Pa×s	389.98	Joback Method
dvisc	0.0020165	Pa×s	349.60	Joback Method

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=C5910281&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
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
ie:	Ionization energy
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