Phenanthrene, 9,10-dihydro-1-methyl-

Inchi: InChI=1S/C15H14/c1-11-5-4-8-15-13(11)10-9-12-6-2-3-7-14(12)15/h2-8H,9-10H2,1H3
InchiKey: KACMLUGSVCDKQA-UHFFFAOYSA-N
Formula: C15H14
SMILES: Cc1cccc2c1CCc1ccccc1-2
Mol. weight [g/mol]: 194.27
CAS: 95676-48-5

Physical Properties

Property code	Value	Unit	Source
gf	351.91	kJ/mol	Joback Method
hf	185.02	kJ/mol	Joback Method
hfus	20.68	kJ/mol	Joback Method
hvap	55.57	kJ/mol	Joback Method
log10ws	-5.21		Crippen Method
logp	3.761		Crippen Method
mcvol	163.830	ml/mol	McGowan Method
pc	2761.36	kPa	Joback Method
tb	618.04	K	Joback Method
tc	864.72	K	Joback Method
tf	374.91	K	Joback Method
vc	0.625	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	402.53	J/mol×K	618.04	Joback Method
cpg	473.57	J/mol×K	823.61	Joback Method
cpg	461.43	J/mol×K	782.50	Joback Method
cpg	448.38	J/mol×K	741.38	Joback Method
cpg	434.30	J/mol×K	700.27	Joback Method
cpg	419.05	J/mol×K	659.15	Joback Method
cpg	484.92	J/mol×K	864.72	Joback Method
dvisc	0.0004377	Pa×s	618.04	Joback Method
dvisc	0.0004990	Pa×s	577.52	Joback Method

dvisc	0.0005803	Pa×s	537.00	Joback Method
dvisc	0.0006916	Pa×s	496.48	Joback Method
dvisc	0.0008503	Pa×s	455.95	Joback Method
dvisc	0.0010885	Pa×s	415.43	Joback Method
dvisc	0.0014698	Pa×s	374.91	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C95676485&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume