1H-Benz[f]indene

Inchi: InChI=1S/C13H10/c1-2-5-11-9-13-7-3-6-12(13)8-10(11)4-1/h1-6,8-9H,7H2
InchiKey: LJVOKUMRGBIJGP-UHFFFAOYSA-N
Formula: C13H10
SMILES: C1=Cc2cc3ccccc3cc2C1
Mol. weight [g/mol]: 166.22
CAS: 268-40-6

Physical Properties

Property code	Value	Unit	Source
gf	356.80	kJ/mol	Joback Method
hf	243.93	kJ/mol	Joback Method
hfus	17.99	kJ/mol	Joback Method
hvap	50.29	kJ/mol	Joback Method
log10ws	-4.38		Crippen Method
logp	3.409		Crippen Method
mcvol	135.650	ml/mol	McGowan Method
pc	3376.28	kPa	Joback Method
tb	563.03	K	Joback Method
tc	810.68	K	Joback Method
tf	343.37	K	Joback Method
vc	0.521	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	306.80	J/mol×K	563.03	Joback Method
cpg	368.35	J/mol×K	769.40	Joback Method
cpg	358.06	J/mol×K	728.13	Joback Method
cpg	346.90	J/mol×K	686.85	Joback Method
cpg	334.73	J/mol×K	645.58	Joback Method
cpg	321.41	J/mol×K	604.30	Joback Method
cpg	377.92	J/mol×K	810.68	Joback Method
dvisc	0.0005951	Pa×s	563.03	Joback Method
dvisc	0.0006572	Pa×s	526.42	Joback Method

dvisc	0.0007367	Pa×s	489.81	Joback Method
dvisc	0.0008412	Pa×s	453.20	Joback Method
dvisc	0.0009831	Pa×s	416.59	Joback Method
dvisc	0.0011839	Pa×s	379.98	Joback Method
dvisc	0.0014835	Pa×s	343.37	Joback Method

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C268406&Units=SI

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