Benzo[b]benzo[3,4]cyclobuta[1,2-e][1,4]dioxin, 4b,10a-dihydro-

Other names: 3H,7,8-Dibenzo-2,5-dioxabicyclo[4.2.0]octa-3,7-diene
Inchi: InChI=1S/C14H10O2/c1-2-6-10-9(5-1)13-14(10)16-12-8-4-3-7-11(12)15-13/h1-8,13-14H
InchiKey: SSPWYTLOLFBHPK-UHFFFAOYSA-N
Formula: C14H10O2
SMILES: c1ccc2c(c1)OC1c3ccccc3C1O2
Mol. weight [g/mol]: 210.23
CAS: 42896-18-4

Physical Properties

Property code	Value	Unit	Source
gf	246.02	kJ/mol	Joback Method
hf	11.75	kJ/mol	Joback Method
hfus	35.75	kJ/mol	Joback Method
hvap	61.14	kJ/mol	Joback Method
ie	7.60 ± 0.02	eV	NIST Webbook
log10ws	-4.00		Crippen Method
logp	3.254		Crippen Method
mcvol	150.620	ml/mol	McGowan Method
pc	3310.55	kPa	Joback Method
tb	641.88	K	Joback Method
tc	895.06	K	Joback Method
tf	421.48	K	Joback Method
vc	0.576	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	398.48	J/mol×K	641.88	Joback Method
cpg	412.96	J/mol×K	684.08	Joback Method
cpg	426.17	J/mol×K	726.27	Joback Method
cpg	438.29	J/mol×K	768.47	Joback Method
cpg	449.51	J/mol×K	810.66	Joback Method
cpg	459.99	J/mol×K	852.86	Joback Method
cpg	469.93	J/mol×K	895.06	Joback Method

dvisc	0.0029382	Pa×s	421.48	Joback Method
dvisc	0.0026272	Pa×s	458.21	Joback Method
dvisc	0.0023884	Pa×s	494.95	Joback Method
dvisc	0.0022001	Pa×s	531.68	Joback Method
dvisc	0.0020483	Pa×s	568.41	Joback Method
dvisc	0.0019235	Pa×s	605.15	Joback Method
dvisc	0.0018194	Pa×s	641.88	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C42896184&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

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