2,2'-Diiodobiphenyl

Inchi: InChI=1S/C12H8I2/c13-11-7-3-1-5-9(11)10-6-2-4-8-12(10)14/h1-8H
InchiKey: OZVRXSGTNWILMN-UHFFFAOYSA-N
Formula: C12H8I2
SMILES: Ic1ccccc1-c1ccccc1I
Mol. weight [g/mol]: 406.00
CAS: 2236-52-4

Physical Properties

Property code	Value	Unit	Source
gf	371.96	kJ/mol	Joback Method
hf	312.85	kJ/mol	Joback Method
hfus	22.95	kJ/mol	Joback Method
hvap	66.93	kJ/mol	Joback Method
log10ws	-6.37		Crippen Method
logp	4.563		Crippen Method
mcvol	184.060	ml/mol	McGowan Method
pc	3149.09	kPa	Joback Method
tb	723.56	K	Joback Method
tc	1038.07	K	Joback Method
tf	419.00	K	Joback Method
vc	0.667	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	363.44	J/mol×K	723.56	Joback Method
cpg	411.57	J/mol×K	985.66	Joback Method
cpg	403.68	J/mol×K	933.24	Joback Method
cpg	395.11	J/mol×K	880.82	Joback Method
cpg	385.67	J/mol×K	828.40	Joback Method
cpg	375.17	J/mol×K	775.98	Joback Method
cpg	418.95	J/mol×K	1038.07	Joback Method
dvisc	0.0001686	Pa×s	723.56	Joback Method
dvisc	0.0002102	Pa×s	672.80	Joback Method

dvisc	0.0002717	Pa×s	622.04	Joback Method
dvisc	0.0003676	Pa×s	571.28	Joback Method
dvisc	0.0005275	Pa×s	520.52	Joback Method
dvisc	0.0008183	Pa×s	469.76	Joback Method
dvisc	0.0014121	Pa×s	419.00	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=C2236524&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
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