1,1'-Biphenyl, 2-iodo-

Other names:	o-Iodobiphenyl
	2-Iodobiphenyl
	o-Phenyliodobenzene
	Biphenyl, 2-iodo-
Inchi:	InChI=1S/C12H9I/c13-12-9-5-4-8-11(12)10-6-2-1-3-7-10/h1-9H
InchiKey:	QFUYDAGNUJWBSM-UHFFFAOYSA-N
Formula:	C12H9I
SMILES:	Ic1ccccc1-c1ccccc1
Mol. weight [g/mol]:	280.10
CAS:	2113-51-1

Physical Properties

Property code	Value	Unit	Source
gf	323.47	kJ/mol	Joback Method
hf	247.45	kJ/mol	Joback Method
hfus	18.93	kJ/mol	Joback Method
hvap	56.89	kJ/mol	Joback Method
ie	8.20 ± 0.02	eV	NIST Webbook
log10ws	-5.22		Crippen Method
logp	3.958		Crippen Method
mcvol	158.240	ml/mol	McGowan Method
pc	3284.05	kPa	Joback Method
tb	625.44	K	Joback Method
tc	909.17	K	Joback Method
tf	348.42	K	Joback Method
vc	0.580	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	326.29	J/mol×K	625.44	Joback Method
cpg	384.55	J/mol×K	861.88	Joback Method
cpg	375.14	J/mol×K	814.59	Joback Method
cpg	364.74	J/mol×K	767.30	Joback Method

cpg	353.21	J/mol×K	720.02	Joback Method
cpg	340.44	J/mol×K	672.73	Joback Method
cpg	393.09	J/mol×K	909.17	Joback Method
dvisc	0.0002083	Pa×s	625.44	Joback Method
dvisc	0.0002623	Pa×s	579.27	Joback Method
dvisc	0.0003439	Pa×s	533.10	Joback Method
dvisc	0.0004747	Pa×s	486.93	Joback Method
dvisc	0.0007009	Pa×s	440.76	Joback Method
dvisc	0.0011336	Pa×s	394.59	Joback Method
dvisc	0.0020828	Pa×s	348.42	Joback Method

Sources

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=C2113511&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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

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