Iodobenzene diacetate

Other names:	Iodosobenzene diacetate
	(Diacetoxyiodo)benzene
	Iodine, bis(acetato-O)phenyl-
	Benzene, (diacetoxyiodo)-
	Benzene, iodoso-, diacetate
	Bis(acetato)phenyliodine
	Phenyliodine diacetate
	Phenyliodo diacetate
	Phenyliodoso acetate
	Phenyliodoso diacetate
	Benzene, (dihydroxyiodo)-, diacetate
	NSC 23801
	Phenyliodine(III) diacetate
	Phenyliodosyl diacetate
	bis(acetato-O)phenyliodine
Inchi:	InChI=1S/C10H11IO4/c1-8(12)14-11(15-9(2)13)10-6-4-3-5-7-10/h3-7H,1-2H3
InchiKey:	ZBIKORITPGTTGI-UHFFFAOYSA-N
Formula:	C10H11IO4
SMILES:	CC(=O)O[IH2](OC(C)=O)c1ccccc1
Mol. weight [g/mol]:	322.10
CAS:	3240-34-4

Physical Properties

Property code	Value	Unit	Source
gf	-368.75	kJ/mol	Joback Method
hf	-537.55	kJ/mol	Joback Method
hfus	22.31	kJ/mol	Joback Method
hvap	68.11	kJ/mol	Joback Method
log10ws	-2.61		Crippen Method
logp	1.783		Crippen Method
mcvol	177.300	ml/mol	McGowan Method
pc	2687.42	kPa	Joback Method
tb	702.00	K	Joback Method
tc	952.58	K	Joback Method
tf	398.52	K	Joback Method
vc	0.641	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	407.92	J/mol×K	702.00	Joback Method
cpg	461.23	J/mol×K	910.82	Joback Method
cpg	453.25	J/mol×K	869.06	Joback Method
cpg	443.86	J/mol×K	827.29	Joback Method
cpg	433.12	J/mol×K	785.53	Joback Method
cpg	421.11	J/mol×K	743.76	Joback Method
cpg	467.72	J/mol×K	952.58	Joback Method
dvisc	0.0000283	Pa×s	702.00	Joback Method
dvisc	0.0000407	Pa×s	651.42	Joback Method
dvisc	0.0000622	Pa×s	600.84	Joback Method
dvisc	0.0001029	Pa×s	550.26	Joback Method
dvisc	0.0001883	Pa×s	499.68	Joback Method
dvisc	0.0003950	Pa×s	449.10	Joback Method
dvisc	0.0009996	Pa×s	398.52	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=C3240344&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