p-Iodophenyl phenyl ether

Other names:	Benzene, 1,1'-oxybis(4-iodo-
	Bis(p-iodophenyl) ether
	Ether, bis(p-iodophenyl)
	4-Iododiphenyl ether
	4,4'-Diiododiphenyl ether
Inchi:	InChI=1S/C12H9IO/c13-10-6-8-12(9-7-10)14-11-4-2-1-3-5-11/h1-9H
InchiKey:	BDKOUDYNKRCDEC-UHFFFAOYSA-N
Formula:	C12H8I2O
SMILES:	Ic1ccc(Oc2ccccc2)cc1
Mol. weight [g/mol]:	422.00
CAS:	28896-49-3

Physical Properties

Property code	Value	Unit	Source
gf	218.47	kJ/mol	Joback Method
hf	115.23	kJ/mol	Joback Method
hfus	20.12	kJ/mol	Joback Method
hvap	59.30	kJ/mol	Joback Method
log10ws	-4.25		Crippen Method
logp	4.083		Crippen Method
mcvol	164.110	ml/mol	McGowan Method
pc	3220.98	kPa	Joback Method
tb	647.86	K	Joback Method
tc	925.90	K	Joback Method
tf	370.65	K	Joback Method
vc	0.598	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	349.42	J/mol×K	647.86	Joback Method
cpg	363.19	J/mol×K	694.20	Joback Method
cpg	375.68	J/mol×K	740.54	Joback Method
cpg	386.97	J/mol×K	786.88	Joback Method

cpg	397.16	J/mol×K	833.22	Joback Method
cpg	406.33	J/mol×K	879.56	Joback Method
cpg	414.57	J/mol×K	925.90	Joback Method
dvisc	0.0015233	Pa×s	370.65	Joback Method
dvisc	0.0008544	Pa×s	416.85	Joback Method
dvisc	0.0005379	Pa×s	463.05	Joback Method
dvisc	0.0003683	Pa×s	509.25	Joback Method
dvisc	0.0002686	Pa×s	555.46	Joback Method
dvisc	0.0002056	Pa×s	601.66	Joback Method
dvisc	0.0001635	Pa×s	647.86	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C28896493&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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