P,p'-biphenol, 2,2'-difluoro-

Inchi: InChI=1S/C12H8F2O2/c13-9-5-7(1-3-11(9)15)8-2-4-12(16)10(14)6-8/h1-6,15-16H
InchiKey: OXGQXNQNMPUWNP-UHFFFAOYSA-N
Formula: C12H8F2O2
SMILES: Oc1ccc(-c2ccc(O)c(F)c2)cc1F
Mol. weight [g/mol]: 222.19
CAS: 396-86-1

Physical Properties

Property code	Value	Unit	Source
gf	-443.14	kJ/mol	Joback Method
hf	-587.73	kJ/mol	Joback Method
hfus	31.87	kJ/mol	Joback Method
hvap	72.58	kJ/mol	Joback Method
log10ws	-3.83		Crippen Method
logp	3.043		Crippen Method
mcvol	147.700	ml/mol	McGowan Method
pc	4271.86	kPa	Joback Method
tb	697.06	K	Joback Method
tc	942.09	K	Joback Method
tf	527.50	K	Joback Method
vc	0.460	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	386.51	J/mol×K	697.06	Joback Method
cpg	396.76	J/mol×K	737.90	Joback Method
cpg	406.36	J/mol×K	778.74	Joback Method
cpg	415.47	J/mol×K	819.57	Joback Method
cpg	424.28	J/mol×K	860.41	Joback Method
cpg	432.93	J/mol×K	901.25	Joback Method
cpg	441.60	J/mol×K	942.09	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=C396861&Units=SI

Legend

cpg:	Ideal gas heat capacity
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