4-Hydroxy-9-fluorenone

Other names:	Fluoren-9-one, 4-hydroxy- 9H-Fluoren-9-one, 4-hydroxy-
Inchi:	InChI=1S/C13H8O2/c14-11-7-3-6-10-12(11)8-4-1-2-5-9(8)13(10)15/h1-7,14H
InchiKey:	OZLKIIAMQWXVKQ-UHFFFAOYSA-N
Formula:	C13H8O2
SMILES:	O=C1c2ccccc2-c2c(O)cccc21
Mol. weight [g/mol]:	196.20
CAS:	1986-00-1

Physical Properties

Property code	Value	Unit	Source
gf	79.59	kJ/mol	Joback Method
hf	-71.08	kJ/mol	Joback Method
hfus	23.29	kJ/mol	Joback Method
hvap	67.55	kJ/mol	Joback Method
log10ws	-3.83		Crippen Method
logp	2.604		Crippen Method
mcvol	143.090	ml/mol	McGowan Method
pc	4233.04	kPa	Joback Method
tb	711.47	K	Joback Method
tc	979.87	K	Joback Method
tf	523.31	K	Joback Method
vc	0.494	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	372.41	J/mol×K	711.47	Joback Method
cpg	383.92	J/mol×K	756.20	Joback Method
cpg	394.66	J/mol×K	800.94	Joback Method
cpg	404.80	J/mol×K	845.67	Joback Method
cpg	414.55	J/mol×K	890.40	Joback Method
cpg	424.10	J/mol×K	935.14	Joback Method
cpg	433.62	J/mol×K	979.87	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=C1986001&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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