2-Acetylfluorene

Other names:	Ethanone, 1-(9H-fluoren-2-yl)-
	Ketone, fluoren-2-yl methyl
	2-Acetofluorene
	2-Fluorenyl methyl ketone
	fluoren-2-yl methyl ketone
Inchi:	InChI=1S/C15H12O/c1-10(16)11-6-7-15-13(8-11)9-12-4-2-3-5-14(12)15/h2-8H,9H2,1H3
InchiKey:	IBASEVZORZFIIH-UHFFFAOYSA-N
Formula:	C15H12O
SMILES:	CC(=O)c1ccc2c(c1)Cc1ccccc1-2
Mol. weight [g/mol]:	208.26
CAS:	781-73-7

Physical Properties

Property code	Value	Unit	Source
gf	235.09	kJ/mol	Joback Method
hf	78.60	kJ/mol	Joback Method
hfus	24.38	kJ/mol	Joback Method
hvap	62.15	kJ/mol	Joback Method
log10ws	-5.08		Crippen Method
logp	3.460		Crippen Method
mcvol	165.400	ml/mol	McGowan Method
pc	2875.03	kPa	Joback Method
tb	667.64	K	Joback Method
tc	912.28	K	Joback Method
tf	428.36	K	Joback Method
vc	0.639	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	416.36	J/mol×K	667.64	Joback Method
cpg	430.14	J/mol×K	708.41	Joback Method
cpg	442.85	J/mol×K	749.19	Joback Method
cpg	454.64	J/mol×K	789.96	Joback Method

cpg	465.63	J/mol×K	830.74	Joback Method
cpg	475.94	J/mol×K	871.51	Joback Method
cpg	485.73	J/mol×K	912.28	Joback Method
dvisc	0.0018131	Pa×s	428.36	Joback Method
dvisc	0.0014319	Pa×s	468.24	Joback Method
dvisc	0.0011735	Pa×s	508.12	Joback Method
dvisc	0.0009900	Pa×s	548.00	Joback Method
dvisc	0.0008547	Pa×s	587.88	Joback Method
dvisc	0.0007518	Pa×s	627.76	Joback Method
dvisc	0.0006715	Pa×s	667.64	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=C781737&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
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