2,7-Diacetyl-9-fluorenone

Inchi: InChI=1S/C17H12O3/c1-9(18)11-3-5-13-14-6-4-12(10(2)19)8-16(14)17(20)15(13)7-11/h3
InchiKey: LSDGVBCTFOMRGW-UHFFFAOYSA-N
Formula: C17H12O3
SMILES: CC(=O)c1ccc2c(c1)C(=O)c1cc(C(C)=O)ccc1-2
Mol. weight [g/mol]: 264.28
CAS: 39665-89-9

Physical Properties

Property code	Value	Unit	Source
gf	-9.21	kJ/mol	Joback Method
hf	-224.43	kJ/mol	Joback Method
hfus	30.28	kJ/mol	Joback Method
hvap	78.25	kJ/mol	Joback Method
log10ws	-5.60		Crippen Method
logp	3.303		Crippen Method
mcvol	196.720	ml/mol	McGowan Method
pc	2566.29	kPa	Joback Method
tb	840.07	K	Joback Method
tc	1090.12	K	Joback Method
tf	581.57	K	Joback Method
vc	0.764	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	551.97	J/mol×K	840.07	Joback Method
cpg	564.07	J/mol×K	881.74	Joback Method
cpg	575.28	J/mol×K	923.42	Joback Method
cpg	585.69	J/mol×K	965.09	Joback Method
cpg	595.38	J/mol×K	1006.77	Joback Method
cpg	604.43	J/mol×K	1048.44	Joback Method
cpg	612.94	J/mol×K	1090.12	Joback Method

Sources

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=C39665899&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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