P-hydroxybenzylidene malonic acid

Inchi: InChI=1S/C10H8O5/c11-7-3-1-6(2-4-7)5-8(9(12)13)10(14)15/h1-5,11H,(H,12,13)(H,14,15
InchiKey: VIZIOWSVZAXMNU-UHFFFAOYSA-N
Formula: C10H8O5
SMILES: O=C(O)C(=Cc1ccc(O)cc1)C(=O)O
Mol. weight [g/mol]: 208.17
CAS: 17449-03-5

Physical Properties

Property code	Value	Unit	Source
gf	-468.70	kJ/mol	Joback Method
hf	-612.70	kJ/mol	Joback Method
hfus	31.75	kJ/mol	Joback Method
hvap	100.03	kJ/mol	Joback Method
log10ws	-0.88		Crippen Method
logp	0.945		Crippen Method
mcvol	144.450	ml/mol	McGowan Method
pc	5644.74	kPa	Joback Method
tb	831.64	K	Joback Method
tc	1046.33	K	Joback Method
tf	543.06	K	Joback Method
vc	0.484	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	393.10	J/mol×K	831.64	Joback Method
cpg	399.89	J/mol×K	867.42	Joback Method
cpg	406.44	J/mol×K	903.20	Joback Method
cpg	412.84	J/mol×K	938.99	Joback Method
cpg	419.18	J/mol×K	974.77	Joback Method
cpg	425.54	J/mol×K	1010.55	Joback Method
cpg	432.02	J/mol×K	1046.33	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=C17449035&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