Succinic acid,2-(o-hydroxyphenyl)-2-phenyl-,gamma-lactor

Inchi: InChI=1S/C16H12O4/c17-14(18)10-16(11-6-2-1-3-7-11)12-8-4-5-9-13(12)20-15(16)19/h1

InchiKey: RHTPJUYOMAAXFW-UHFFFAOYSA-N

Formula: C16H12O4

SMILES: O=C(O)CC1(c2ccccc2)C(=O)Oc2ccccc21

Mol. weight [g/mol]: 268.26

CAS: 116465-78-2

Physical Properties

Property code	Value	Unit	Source
gf	-120.16	kJ/mol	Joback Method
hf	-358.45	kJ/mol	Joback Method
hfus	29.90	kJ/mol	Joback Method
hvap	87.37	kJ/mol	Joback Method
log10ws	-2.97		Crippen Method
logp	2.366		Crippen Method
mcvol	192.800	ml/mol	McGowan Method
pc	3261.58	kPa	Joback Method
tb	871.62	K	Joback Method
tc	1117.76	K	Joback Method
tf	582.82	K	Joback Method
vc	0.724	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	576.07	J/mol×K	871.62	Joback Method
cpg	589.53	J/mol×K	912.64	Joback Method
cpg	602.88	J/mol×K	953.67	Joback Method
cpg	616.34	J/mol×K	994.69	Joback Method
cpg	630.10	J/mol×K	1035.72	Joback Method
cpg	644.35	J/mol×K	1076.74	Joback Method
cpg	659.31	J/mol×K	1117.76	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=C116465782&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