Succinic acid, cyclohexylmethyl 4-biphenyl ester

Inchi: InChI=1S/C23H26O4/c24-22(26-17-18-7-3-1-4-8-18)15-16-23(25)27-21-13-11-20(12-14-

InchiKey: GNVSUWJZFREDRA-UHFFFAOYSA-N

Formula: C23H26O4

SMILES: O=C(CCC(=O)Oc1ccc(-c2ccccc2)cc1)OCC1CCCCC1

Mol. weight [g/mol]: 366.45

Physical Properties

Property code	Value	Unit	Source
gf	-85.42	kJ/mol	Joback Method
hf	-491.74	kJ/mol	Joback Method
hfus	40.43	kJ/mol	Joback Method
hvap	90.75	kJ/mol	Joback Method
log10ws	-6.67		Crippen Method
logp	5.163		Crippen Method
mcvol	291.430	ml/mol	McGowan Method
pc	1623.29	kPa	Joback Method
rinpol	3177.00		NIST Webbook
rinpol	3177.00		NIST Webbook
tb	956.11	K	Joback Method
tc	1198.20	K	Joback Method
tf	566.03	K	Joback Method
vc	1.089	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	950.24	J/mol×K	956.11	Joback Method
cpg	964.75	J/mol×K	996.46	Joback Method
cpg	977.52	J/mol×K	1036.81	Joback Method
cpg	988.62	J/mol×K	1077.16	Joback Method
cpg	998.11	J/mol×K	1117.50	Joback Method
cpg	1006.07	J/mol×K	1157.85	Joback Method
cpg	1012.55	J/mol×K	1198.20	Joback Method
dvisc	0.0004242	Pa×s	566.03	Joback Method

dvisc	0.0002305	Pa×s	631.04	Joback Method
dvisc	0.0001403	Pa×s	696.06	Joback Method
dvisc	0.0000930	Pa×s	761.07	Joback Method
dvisc	0.0000657	Pa×s	826.08	Joback Method
dvisc	0.0000489	Pa×s	891.10	Joback Method
dvisc	0.0000379	Pa×s	956.11	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390088&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume