Succinic acid, 8-chlorooctyl 4-biphenyl ester

Inchi: InChI=1S/C24H29ClO4/c25-18-8-3-1-2-4-9-19-28-23(26)16-17-24(27)29-22-14-12-21(13
InchiKey: LYRCTFIGGMSLOK-UHFFFAOYSA-N
Formula: C24H29ClO4
SMILES: O=C(CCC(=O)Oc1ccc(-c2ccccc2)cc1)OCCCCCCCCCCl
Mol. weight [g/mol]: 416.94

Physical Properties

Property code	Value	Unit	Source
gf	-113.38	kJ/mol	Joback Method
hf	-582.44	kJ/mol	Joback Method
hfus	55.38	kJ/mol	Joback Method
hvap	96.93	kJ/mol	Joback Method
log10ws	-7.59		Crippen Method
logp	6.162		Crippen Method
mcvol	328.620	ml/mol	McGowan Method
pc	1257.48	kPa	Joback Method
rinpol	2477.00		NIST Webbook
rinpol	2477.00		NIST Webbook
tb	996.87	K	Joback Method
tc	1225.27	K	Joback Method
tf	599.84	K	Joback Method
vc	1.260	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1039.60	J/mol×K	996.87	Joback Method
cpg	1092.06	J/mol×K	1187.20	Joback Method
cpg	1084.07	J/mol×K	1149.14	Joback Method
cpg	1074.89	J/mol×K	1111.07	Joback Method
cpg	1064.46	J/mol×K	1073.00	Joback Method
cpg	1052.72	J/mol×K	1034.94	Joback Method
cpg	1098.91	J/mol×K	1225.27	Joback Method
dvisc	0.0000269	Pa×s	996.87	Joback Method

dvisc	0.0000345	Pa×s	930.70	Joback Method
dvisc	0.0000460	Pa×s	864.53	Joback Method
dvisc	0.0000644	Pa×s	798.36	Joback Method
dvisc	0.0000956	Pa×s	732.18	Joback Method
dvisc	0.0001536	Pa×s	666.01	Joback Method
dvisc	0.0002739	Pa×s	599.84	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390092&Units=SI

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