Succinic acid, 8-chlorooctyl diphenylmethyl ester

Inchi: InChI=1S/C25H31ClO4/c26-19-11-3-1-2-4-12-20-29-23(27)17-18-24(28)30-25(21-13-7-5
InchiKey: RYWNQMXBFIVKPS-UHFFFAOYSA-N
Formula: C25H31ClO4
SMILES: O=C(CCC(=O)OC(c1ccccc1)c1ccccc1)OCCCCCCCCCCl
Mol. weight [g/mol]: 430.96

Physical Properties

Property code	Value	Unit	Source
gf	-97.77	kJ/mol	Joback Method
hf	-596.89	kJ/mol	Joback Method
hfus	54.84	kJ/mol	Joback Method
hvap	98.10	kJ/mol	Joback Method
log10ws	-6.93		Crippen Method
logp	6.222		Crippen Method
mcvol	342.710	ml/mol	McGowan Method
pc	1194.82	kPa	Joback Method
rinpol	3271.00		NIST Webbook
rinpol	3271.00		NIST Webbook
tb	1014.33	K	Joback Method
tc	1245.11	K	Joback Method
tf	583.59	K	Joback Method
vc	1.310	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1101.24	J/mol×K	1014.33	Joback Method
cpg	1114.58	J/mol×K	1052.79	Joback Method
cpg	1126.51	J/mol×K	1091.26	Joback Method
cpg	1137.12	J/mol×K	1129.72	Joback Method
cpg	1146.48	J/mol×K	1168.18	Joback Method
cpg	1154.65	J/mol×K	1206.64	Joback Method
cpg	1161.72	J/mol×K	1245.11	Joback Method
dvisc	0.0002974	Pa×s	583.59	Joback Method

dvisc	0.0001492	Pa×s	655.38	Joback Method
dvisc	0.0000857	Pa×s	727.17	Joback Method
dvisc	0.0000544	Pa×s	798.96	Joback Method
dvisc	0.0000372	Pa×s	870.75	Joback Method
dvisc	0.0000270	Pa×s	942.54	Joback Method
dvisc	0.0000205	Pa×s	1014.33	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=U390174&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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