Succinic acid, 8-chlorooctyl 2-naphthylmethyl ester

Inchi: InChI=1S/C23H29ClO4/c24-15-7-3-1-2-4-8-16-27-22(25)13-14-23(26)28-18-19-11-12-20

InchiKey: LLEWPQILPVATSY-UHFFFAOYSA-N

Formula: C23H29ClO4

SMILES: O=C(CCC(=O)OCc1ccc2ccccc2c1)OCCCCCCCCCl

Mol. weight [g/mol]: 404.93

Physical Properties

Property code	Value	Unit	Source
gf	-127.56	kJ/mol	Joback Method
hf	-607.26	kJ/mol	Joback Method
hfus	55.77	kJ/mol	Joback Method
hvap	94.07	kJ/mol	Joback Method
log10ws	-7.06		Crippen Method
logp	5.786		Crippen Method
mcvol	318.830	ml/mol	McGowan Method
pc	1266.45	kPa	Joback Method
rinpol	3351.00		NIST Webbook
rinpol	3351.00		NIST Webbook
tb	966.29	K	Joback Method
tc	1187.28	K	Joback Method
tf	594.85	K	Joback Method
vc	1.234	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1003.96	J/mol×K	966.29	Joback Method
cpg	1063.84	J/mol×K	1150.45	Joback Method
cpg	1053.82	J/mol×K	1113.62	Joback Method
cpg	1042.89	J/mol×K	1076.79	Joback Method
cpg	1030.98	J/mol×K	1039.95	Joback Method
cpg	1018.03	J/mol×K	1003.12	Joback Method
cpg	1073.01	J/mol×K	1187.28	Joback Method
dvisc	0.0000628	Pa×s	966.29	Joback Method

dvisc	0.0000780	Pa×s	904.38	Joback Method
dvisc	0.0001001	Pa×s	842.48	Joback Method
dvisc	0.0001337	Pa×s	780.57	Joback Method
dvisc	0.0001876	Pa×s	718.66	Joback Method
dvisc	0.0002805	Pa×s	656.76	Joback Method
dvisc	0.0004562	Pa×s	594.85	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=U390009&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
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