Succinic acid, dec-2-yl (2-chlorocyclohexyl)methyl ester

Inchi: InChI=1S/C21H37ClO4/c1-3-4-5-6-7-8-11-17(2)26-21(24)15-14-20(23)25-16-18-12-9-10-
InchiKey: XREABIWDBIKIDO-UHFFFAOYSA-N
Formula: C21H37ClO4
SMILES: CCCCCCCCC(C)OC(=O)CCC(=O)OCC1CCCCC1Cl
Mol. weight [g/mol]: 388.97

Physical Properties

Property code	Value	Unit	Source
gf	-339.53	kJ/mol	Joback Method
hf	-953.41	kJ/mol	Joback Method
hfus	49.30	kJ/mol	Joback Method
hvap	84.77	kJ/mol	Joback Method
log10ws	-6.37		Crippen Method
logp	5.790		Crippen Method
mcvol	323.010	ml/mol	McGowan Method
pc	1111.85	kPa	Joback Method
rinpol	2725.00		NIST Webbook
rinpol	2725.00		NIST Webbook
tb	884.33	K	Joback Method
tc	1088.19	K	Joback Method
tf	488.81	K	Joback Method
vc	1.234	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1062.55	J/mol×K	884.33	Joback Method
cpg	1138.82	J/mol×K	1054.22	Joback Method
cpg	1126.38	J/mol×K	1020.24	Joback Method
cpg	1112.56	J/mol×K	986.26	Joback Method
cpg	1097.33	J/mol×K	952.28	Joback Method
cpg	1080.67	J/mol×K	918.31	Joback Method
cpg	1149.90	J/mol×K	1088.19	Joback Method
dvisc	0.0000483	Pa×s	884.33	Joback Method

dvisc	0.0000641	Pa×s	818.41	Joback Method
dvisc	0.0000894	Pa×s	752.49	Joback Method
dvisc	0.0001329	Pa×s	686.57	Joback Method
dvisc	0.0002151	Pa×s	620.65	Joback Method
dvisc	0.0003901	Pa×s	554.73	Joback Method
dvisc	0.0008310	Pa×s	488.81	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=U391404&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