Succinic acid, cyclohexylmethyl dec-4-en-1-yl ester

Inchi: InChI=1S/C21H36O4/c1-2-3-4-5-6-7-8-12-17-24-20(22)15-16-21(23)25-18-19-13-10-9-11

InchiKey: ORUAISRXTSMWOC-VOTSOKGWSA-N

Formula: C21H36O4

SMILES: CCCCCC=CCCCOC(=O)CCC(=O)OCC1CCCCC1

Mol. weight [g/mol]: 352.51

Physical Properties

Property code	Value	Unit	Source
gf	-237.23	kJ/mol	Joback Method
hf	-794.83	kJ/mol	Joback Method
hfus	47.76	kJ/mol	Joback Method
hvap	81.04	kJ/mol	Joback Method
log10ws	-5.84		Crippen Method
logp	5.350		Crippen Method
mcvol	306.470	ml/mol	McGowan Method
pc	1201.46	kPa	Joback Method
rinpol	2557.00		NIST Webbook
rinpol	2557.00		NIST Webbook
tb	856.17	K	Joback Method
tc	1056.85	K	Joback Method
tf	473.05	K	Joback Method
vc	1.173	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1001.38	J/mol×K	856.17	Joback Method
cpg	1019.95	J/mol×K	889.62	Joback Method
cpg	1037.22	J/mol×K	923.06	Joback Method
cpg	1053.24	J/mol×K	956.51	Joback Method
cpg	1068.05	J/mol×K	989.96	Joback Method
cpg	1081.69	J/mol×K	1023.40	Joback Method
cpg	1094.19	J/mol×K	1056.85	Joback Method
dvisc	0.0007966	Pa×s	473.05	Joback Method

dvisc	0.0003631	Pa×s	536.90	Joback Method
dvisc	0.0001956	Pa×s	600.76	Joback Method
dvisc	0.0001187	Pa×s	664.61	Joback Method
dvisc	0.0000786	Pa×s	728.46	Joback Method
dvisc	0.0000556	Pa×s	792.32	Joback Method
dvisc	0.0000414	Pa×s	856.17	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U391176&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