Succinic acid, cyclohexylmethyl 2,4-dimethylpent-3-yl ester

Inchi: InChI=1S/C18H32O4/c1-13(2)18(14(3)4)22-17(20)11-10-16(19)21-12-15-8-6-5-7-9-15/h1

InchiKey: ZXMKDVWWAIGNLN-UHFFFAOYSA-N

Formula: C18H32O4

SMILES: CC(C)C(OC(=O)CCC(=O)OCC1CCCCC1)C(C)C

Mol. weight [g/mol]: 312.44

Physical Properties

Property code	Value	Unit	Source
gf	-350.03	kJ/mol	Joback Method
hf	-865.97	kJ/mol	Joback Method
hfus	29.22	kJ/mol	Joback Method
hvap	73.24	kJ/mol	Joback Method
log10ws	-4.36		Crippen Method
logp	4.114		Crippen Method
mcvol	268.500	ml/mol	McGowan Method
pc	1451.25	kPa	Joback Method
rinpol	2103.00		NIST Webbook
rinpol	2103.00		NIST Webbook
tb	782.05	K	Joback Method
tc	983.98	K	Joback Method
tf	399.32	K	Joback Method
vc	1.006	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	847.43	J/mol×K	782.05	Joback Method
cpg	866.76	J/mol×K	815.70	Joback Method
cpg	884.76	J/mol×K	849.36	Joback Method
cpg	901.47	J/mol×K	883.01	Joback Method
cpg	916.89	J/mol×K	916.67	Joback Method
cpg	931.05	J/mol×K	950.32	Joback Method
cpg	943.97	J/mol×K	983.98	Joback Method
dvisc	0.0022010	Pa×s	399.32	Joback Method

dvisc	0.0007875	Pa×s	463.11	Joback Method
dvisc	0.0003614	Pa×s	526.90	Joback Method
dvisc	0.0001962	Pa×s	590.68	Joback Method
dvisc	0.0001200	Pa×s	654.47	Joback Method
dvisc	0.0000801	Pa×s	718.26	Joback Method
dvisc	0.0000571	Pa×s	782.05	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390508&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

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