Succinic acid, 2-ethylhexyl 4-methylpent-2-yl ester

Inchi: InChI=1S/C18H34O4/c1-6-8-9-16(7-2)13-21-17(19)10-11-18(20)22-15(5)12-14(3)4/h14-1

InchiKey: NAVYICXRUUSLKG-UHFFFAOYSA-N

Formula: C18H34O4

SMILES: CCCCC(CC)COC(=O)CCC(=O)OC(C)CC(C)C

Mol. weight [g/mol]: 314.46

Physical Properties

Property code	Value	Unit	Source
gf	-374.48	kJ/mol	Joback Method
hf	-920.29	kJ/mol	Joback Method
hfus	37.38	kJ/mol	Joback Method
hvap	72.81	kJ/mol	Joback Method
log10ws	-4.71		Crippen Method
logp	4.504		Crippen Method
mcvol	279.360	ml/mol	McGowan Method
pc	1248.61	kPa	Joback Method
rinpol	1922.00		NIST Webbook
rinpol	1922.00		NIST Webbook
tb	762.50	K	Joback Method
tc	945.56	K	Joback Method
tf	391.94	K	Joback Method
vc	1.073	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	850.95	J/mol×K	762.50	Joback Method
cpg	930.54	J/mol×K	915.05	Joback Method
cpg	916.55	J/mol×K	884.54	Joback Method
cpg	901.60	J/mol×K	854.03	Joback Method
cpg	885.70	J/mol×K	823.52	Joback Method
cpg	868.82	J/mol×K	793.01	Joback Method
cpg	943.60	J/mol×K	945.56	Joback Method
dvisc	0.0000552	Pa×s	762.50	Joback Method

dvisc	0.0000768	Pa×s	700.74	Joback Method
dvisc	0.0001139	Pa×s	638.98	Joback Method
dvisc	0.0001837	Pa×s	577.22	Joback Method
dvisc	0.0003322	Pa×s	515.46	Joback Method
dvisc	0.0007062	Pa×s	453.70	Joback Method
dvisc	0.0019037	Pa×s	391.94	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390429&Units=SI

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