Succinic acid, octadecyl pent-4-enyl ester

Inchi: InChI=1S/C27H50O4/c1-3-5-7-8-9-10-11-12-13-14-15-16-17-18-19-21-25-31-27(29)23-2
InchiKey: JWDPNUJKTJKLQU-UHFFFAOYSA-N
Formula: C27H50O4
SMILES: C=CCCCOC(=O)CCC(=O)OCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 438.68

Physical Properties

Property code	Value	Unit	Source
gf	-203.54	kJ/mol	Joback Method
hf	-964.78	kJ/mol	Joback Method
hfus	69.98	kJ/mol	Joback Method
hvap	93.34	kJ/mol	Joback Method
log10ws	-8.70		Crippen Method
logp	8.081		Crippen Method
mcvol	401.870	ml/mol	McGowan Method
pc	740.03	kPa	Joback Method
rinpol	3023.00		NIST Webbook
rinpol	3023.00		NIST Webbook
tb	966.42	K	Joback Method
tc	1192.80	K	Joback Method
tf	536.61	K	Joback Method
vc	1.577	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1379.69	J/mol×K	966.42	Joback Method
cpg	1470.03	J/mol×K	1155.07	Joback Method
cpg	1455.15	J/mol×K	1117.34	Joback Method
cpg	1438.75	J/mol×K	1079.61	Joback Method
cpg	1420.75	J/mol×K	1041.88	Joback Method
cpg	1401.08	J/mol×K	1004.15	Joback Method
cpg	1483.43	J/mol×K	1192.80	Joback Method
dvisc	0.0000200	Pa×s	966.42	Joback Method

dvisc	0.0000267	Pa×s	894.79	Joback Method
dvisc	0.0000377	Pa×s	823.15	Joback Method
dvisc	0.0000566	Pa×s	751.52	Joback Method
dvisc	0.0000928	Pa×s	679.88	Joback Method
dvisc	0.0001709	Pa×s	608.25	Joback Method
dvisc	0.0003705	Pa×s	536.61	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=U353384&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