Succinic acid, 3-methylbut-2-en-1-yl dec-4-en-1-yl ester

Inchi: InChI=1S/C19H32O4/c1-4-5-6-7-8-9-10-11-15-22-18(20)12-13-19(21)23-16-14-17(2)3/h8
InchiKey: QAAUULOMUPOIFK-CMDGGOBGSA-N
Formula: C19H32O4
SMILES: CCCCCC=CCCCOC(=O)CCC(=O)OCC=C(C)C
Mol. weight [g/mol]: 324.45

Physical Properties

Property code	Value	Unit	Source
gf	-206.85	kJ/mol	Joback Method
hf	-700.44	kJ/mol	Joback Method
hfus	49.63	kJ/mol	Joback Method
hvap	76.20	kJ/mol	Joback Method
log10ws	-5.21		Crippen Method
logp	4.736		Crippen Method
mcvol	284.850	ml/mol	McGowan Method
pc	1238.96	kPa	Joback Method
rinpol	2252.00		NIST Webbook
rinpol	2252.00		NIST Webbook
tb	794.90	K	Joback Method
tc	983.19	K	Joback Method
tf	424.09	K	Joback Method
vc	1.109	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	858.69	J/mol×K	794.90	Joback Method
cpg	875.54	J/mol×K	826.28	Joback Method
cpg	891.47	J/mol×K	857.66	Joback Method
cpg	906.51	J/mol×K	889.05	Joback Method
cpg	920.72	J/mol×K	920.43	Joback Method
cpg	934.10	J/mol×K	951.81	Joback Method
cpg	946.71	J/mol×K	983.19	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U391171&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
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