Succinic acid, pent-4-enyl undecyl ester

Inchi: InChI=1S/C20H36O4/c1-3-5-7-8-9-10-11-12-14-18-24-20(22)16-15-19(21)23-17-13-6-4-2
InchiKey: XIIJGXWHOOXZSZ-UHFFFAOYSA-N
Formula: C20H36O4
SMILES: C=CCCCOC(=O)CCC(=O)OCCCCCCCCCCC
Mol. weight [g/mol]: 340.50

Physical Properties

Property code	Value	Unit	Source
gf	-262.48	kJ/mol	Joback Method
hf	-820.30	kJ/mol	Joback Method
hfus	51.85	kJ/mol	Joback Method
hvap	77.76	kJ/mol	Joback Method
log10ws	-5.77		Crippen Method
logp	5.350		Crippen Method
mcvol	303.240	ml/mol	McGowan Method
pc	1108.15	kPa	Joback Method
rinpol	2333.00		NIST Webbook
rinpol	2333.00		NIST Webbook
tb	806.26	K	Joback Method
tc	990.25	K	Joback Method
tf	457.72	K	Joback Method
vc	1.185	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	942.24	J/mol×K	806.26	Joback Method
cpg	959.95	J/mol×K	836.93	Joback Method
cpg	976.64	J/mol×K	867.59	Joback Method
cpg	992.36	J/mol×K	898.26	Joback Method
cpg	1007.10	J/mol×K	928.92	Joback Method
cpg	1020.90	J/mol×K	959.59	Joback Method
cpg	1033.77	J/mol×K	990.25	Joback Method
dvisc	0.0008509	Pa×s	457.72	Joback Method

dvisc	0.0004205	Pa×s	515.81	Joback Method
dvisc	0.0002396	Pa×s	573.90	Joback Method
dvisc	0.0001515	Pa×s	631.99	Joback Method
dvisc	0.0001034	Pa×s	690.08	Joback Method
dvisc	0.0000749	Pa×s	748.17	Joback Method
dvisc	0.0000569	Pa×s	806.26	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=U353377&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