Succinic acid, dodec-2-en-1-yl but-2-en-1-yl ester

Inchi: InChI=1S/C20H34O4/c1-3-5-7-8-9-10-11-12-13-14-18-24-20(22)16-15-19(21)23-17-6-4-2

InchiKey: SYOFIVXEURIPRU-IWXPDAORSA-N

Formula: C20H34O4

SMILES: CC=CCOC(=O)CCC(=O)OCC=CCCCCCCCCC

Mol. weight [g/mol]: 338.48

Physical Properties

Property code	Value	Unit	Source
gf	-189.88	kJ/mol	Joback Method
hf	-711.29	kJ/mol	Joback Method
hfus	53.53	kJ/mol	Joback Method
hvap	78.34	kJ/mol	Joback Method
log10ws	-5.63		Crippen Method
logp	5.126		Crippen Method
mcvol	298.940	ml/mol	McGowan Method
pc	1155.35	kPa	Joback Method
rinpol	2396.00		NIST Webbook
rinpol	2396.00		NIST Webbook
tb	817.90	K	Joback Method
tc	1006.76	K	Joback Method
tf	449.32	K	Joback Method
vc	1.163	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	918.35	J/mol×K	817.90	Joback Method
cpg	994.93	J/mol×K	975.28	Joback Method
cpg	981.37	J/mol×K	943.80	Joback Method
cpg	966.96	J/mol×K	912.33	Joback Method
cpg	951.68	J/mol×K	880.85	Joback Method
cpg	935.49	J/mol×K	849.38	Joback Method
cpg	1007.70	J/mol×K	1006.76	Joback Method
dvisc	0.0000403	Pa×s	817.90	Joback Method

dvisc	0.0000537	Pa×s	756.47	Joback Method
dvisc	0.0000752	Pa×s	695.04	Joback Method
dvisc	0.0001123	Pa×s	633.61	Joback Method
dvisc	0.0001831	Pa×s	572.18	Joback Method
dvisc	0.0003356	Pa×s	510.75	Joback Method
dvisc	0.0007261	Pa×s	449.32	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U391230&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