Succinic acid, di(2,4-dimethylpent-3-yl) ester

Inchi: InChI=1S/C18H34O4/c1-11(2)17(12(3)4)21-15(19)9-10-16(20)22-18(13(5)6)14(7)8/h11-1
InchiKey: YJCKWPXGDRTLCZ-UHFFFAOYSA-N
Formula: C18H34O4
SMILES: CC(C)C(OC(=O)CCC(=O)OC(C(C)C)C(C)C)C(C)C
Mol. weight [g/mol]: 314.46

Physical Properties

Property code	Value	Unit	Source
gf	-381.80	kJ/mol	Joback Method
hf	-936.13	kJ/mol	Joback Method
hfus	26.81	kJ/mol	Joback Method
hvap	71.65	kJ/mol	Joback Method
log10ws	-4.34		Crippen Method
logp	4.214		Crippen Method
mcvol	279.360	ml/mol	McGowan Method
pc	1270.06	kPa	Joback Method
rinpol	1840.00		NIST Webbook
rinpol	1840.00		NIST Webbook
tb	761.18	K	Joback Method
tc	949.75	K	Joback Method
tf	346.94	K	Joback Method
vc	1.056	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	852.40	J/mol×K	761.18	Joback Method
cpg	870.84	J/mol×K	792.61	Joback Method
cpg	888.20	J/mol×K	824.04	Joback Method
cpg	904.51	J/mol×K	855.46	Joback Method
cpg	919.77	J/mol×K	886.89	Joback Method
cpg	933.99	J/mol×K	918.32	Joback Method
cpg	947.20	J/mol×K	949.75	Joback Method
dvisc	0.0045436	Pa×s	346.94	Joback Method

dvisc	0.0010980	Pa×s	415.98	Joback Method
dvisc	0.0003976	Pa×s	485.02	Joback Method
dvisc	0.0001854	Pa×s	554.06	Joback Method
dvisc	0.0001024	Pa×s	623.10	Joback Method
dvisc	0.0000637	Pa×s	692.14	Joback Method
dvisc	0.0000431	Pa×s	761.18	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U349367&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