Succinic acid, pentadecyl pent-4-enyl ester

Inchi: InChI=1S/C24H44O4/c1-3-5-7-8-9-10-11-12-13-14-15-16-18-22-28-24(26)20-19-23(25)2
InchiKey: YJJFWHRFBFMLQY-UHFFFAOYSA-N
Formula: C24H44O4
SMILES: C=CCCCOC(=O)CCC(=O)OCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 396.60

Physical Properties

Property code	Value	Unit	Source
gf	-228.80	kJ/mol	Joback Method
hf	-902.86	kJ/mol	Joback Method
hfus	62.21	kJ/mol	Joback Method
hvap	86.66	kJ/mol	Joback Method
log10ws	-7.45		Crippen Method
logp	6.910		Crippen Method
mcvol	359.600	ml/mol	McGowan Method
pc	871.19	kPa	Joback Method
rinpol	2726.00		NIST Webbook
tb	897.78	K	Joback Method
tc	1099.94	K	Joback Method
tf	502.80	K	Joback Method
vc	1.409	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1188.70	J/mol×K	897.78	Joback Method
cpg	1208.28	J/mol×K	931.47	Joback Method
cpg	1226.53	J/mol×K	965.17	Joback Method
cpg	1243.49	J/mol×K	998.86	Joback Method
cpg	1259.19	J/mol×K	1032.56	Joback Method
cpg	1273.67	J/mol×K	1066.25	Joback Method
cpg	1286.97	J/mol×K	1099.94	Joback Method
dvisc	0.0005395	Pa×s	502.80	Joback Method
dvisc	0.0002558	Pa×s	568.63	Joback Method

dvisc	0.0001416	Pa×s	634.46	Joback Method
dvisc	0.0000876	Pa×s	700.29	Joback Method
dvisc	0.0000588	Pa×s	766.12	Joback Method
dvisc	0.0000421	Pa×s	831.95	Joback Method
dvisc	0.0000316	Pa×s	897.78	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=U353381&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

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