Succinic acid, di(dec-9-en-1-yl) ester

Inchi: InChI=1S/C24H42O4/c1-3-5-7-9-11-13-15-17-21-27-23(25)19-20-24(26)28-22-18-16-14-
InchiKey: PQKFZJXHNIXKBF-UHFFFAOYSA-N
Formula: C24H42O4
SMILES: C=CCCCCCCCCOC(=O)CCC(=O)OCCCCCCCCC=C
Mol. weight [g/mol]: 394.59

Physical Properties

Property code	Value	Unit	Source
gf	-140.96	kJ/mol	Joback Method
hf	-777.43	kJ/mol	Joback Method
hfus	60.93	kJ/mol	Joback Method
hvap	85.99	kJ/mol	Joback Method
log10ws	-7.30		Crippen Method
logp	6.686		Crippen Method
mcvol	355.300	ml/mol	McGowan Method
pc	893.20	kPa	Joback Method
rinpol	2798.00		NIST Webbook
rinpol	2798.00		NIST Webbook
tb	894.46	K	Joback Method
tc	1095.40	K	Joback Method
tf	501.04	K	Joback Method
vc	1.389	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1159.92	J/mol×K	894.46	Joback Method
cpg	1242.63	J/mol×K	1061.91	Joback Method
cpg	1228.45	J/mol×K	1028.42	Joback Method
cpg	1213.13	J/mol×K	994.93	Joback Method
cpg	1196.63	J/mol×K	961.44	Joback Method
cpg	1178.91	J/mol×K	927.95	Joback Method
cpg	1255.72	J/mol×K	1095.40	Joback Method
dvisc	0.0000340	Pa×s	894.46	Joback Method

dvisc	0.0000450	Pa×s	828.89	Joback Method
dvisc	0.0000626	Pa×s	763.32	Joback Method
dvisc	0.0000926	Pa×s	697.75	Joback Method
dvisc	0.0001484	Pa×s	632.18	Joback Method
dvisc	0.0002655	Pa×s	566.61	Joback Method
dvisc	0.0005529	Pa×s	501.04	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U391253&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
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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