Succinic acid, dodec-2-en-1-yl 2,3-dimethylphenyl ester

Inchi: InChI=1S/C24H36O4/c1-4-5-6-7-8-9-10-11-12-13-19-27-23(25)17-18-24(26)28-22-16-14

InchiKey: CRJVVPLAKWGPAQ-OUKQBFOZSA-N

Formula: C24H36O4

SMILES: CCCCCCCCCC=CCOC(=O)CCC(=O)Oc1cccc(C)c1C

Mol. weight [g/mol]: 388.54

Physical Properties

Property code	Value	Unit	Source
gf	-143.27	kJ/mol	Joback Method
hf	-697.48	kJ/mol	Joback Method
hfus	56.95	kJ/mol	Joback Method
hvap	90.89	kJ/mol	Joback Method
log10ws	-7.31		Crippen Method
logp	6.229		Crippen Method
mcvol	335.840	ml/mol	McGowan Method
pc	1056.20	kPa	Joback Method
rinpol	2930.00		NIST Webbook
rinpol	2930.00		NIST Webbook
tb	941.90	K	Joback Method
tc	1154.37	K	Joback Method
tf	550.94	K	Joback Method
vc	1.300	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1090.89	J/mol×K	941.90	Joback Method
cpg	1107.43	J/mol×K	977.31	Joback Method
cpg	1122.71	J/mol×K	1012.72	Joback Method
cpg	1136.76	J/mol×K	1048.14	Joback Method
cpg	1149.64	J/mol×K	1083.55	Joback Method
cpg	1161.38	J/mol×K	1118.96	Joback Method
cpg	1172.04	J/mol×K	1154.37	Joback Method
dvisc	0.0003103	Pa×s	550.94	Joback Method

dvisc	0.0001674	Pa×s	616.10	Joback Method
dvisc	0.0001017	Pa×s	681.26	Joback Method
dvisc	0.0000673	Pa×s	746.42	Joback Method
dvisc	0.0000477	Pa×s	811.58	Joback Method
dvisc	0.0000355	Pa×s	876.74	Joback Method
dvisc	0.0000276	Pa×s	941.90	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U390032&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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