Succinic acid, dec-2-yl 3-phenylprop-2-en-1-yl ester

Inchi: InChI=1S/C23H34O4/c1-3-4-5-6-7-9-13-20(2)27-23(25)18-17-22(24)26-19-12-16-21-14-1

InchiKey: PYPUNWDUGUKVKU-FOWTUZBSSA-N

Formula: C23H34O4

SMILES: CCCCCCCCC(C)OC(=O)CCC(=O)OCC=Cc1ccccc1

Mol. weight [g/mol]: 374.51

Physical Properties

Property code	Value	Unit	Source
gf	-134.87	kJ/mol	Joback Method
hf	-659.18	kJ/mol	Joback Method
hfus	51.62	kJ/mol	Joback Method
hvap	86.95	kJ/mol	Joback Method
log10ws	-6.41		Crippen Method
logp	5.706		Crippen Method
mcvol	321.750	ml/mol	McGowan Method
pc	1154.57	kPa	Joback Method
rinpol	2783.00		NIST Webbook
rinpol	2783.00		NIST Webbook
tb	908.62	K	Joback Method
tc	1117.04	K	Joback Method
tf	499.63	K	Joback Method
vc	1.238	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1031.55	J/mol×K	908.62	Joback Method
cpg	1102.50	J/mol×K	1082.30	Joback Method
cpg	1090.52	J/mol×K	1047.57	Joback Method
cpg	1077.48	J/mol×K	1012.83	Joback Method
cpg	1063.34	J/mol×K	978.09	Joback Method
cpg	1048.05	J/mol×K	943.36	Joback Method
cpg	1113.49	J/mol×K	1117.04	Joback Method
dvisc	0.0000280	Pa×s	908.62	Joback Method

dvisc	0.0000375	Pa×s	840.45	Joback Method
dvisc	0.0000528	Pa×s	772.29	Joback Method
dvisc	0.0000794	Pa×s	704.12	Joback Method
dvisc	0.0001304	Pa×s	635.96	Joback Method
dvisc	0.0002413	Pa×s	567.79	Joback Method
dvisc	0.0005281	Pa×s	499.63	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=U391048&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