Succinic acid, hept-2-yl diphenylmethyl ester

Inchi: InChI=1S/C24H30O4/c1-3-4-7-12-19(2)27-22(25)17-18-23(26)28-24(20-13-8-5-9-14-20)2
InchiKey: XBOPTAZEVBVRIT-UHFFFAOYSA-N
Formula: C24H30O4
SMILES: CCCCCC(C)OC(=O)CCC(=O)OC(c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 382.49

Physical Properties

Property code	Value	Unit	Source
gf	-96.70	kJ/mol	Joback Method
hf	-565.79	kJ/mol	Joback Method
hfus	44.53	kJ/mol	Joback Method
hvap	91.11	kJ/mol	Joback Method
log10ws	-6.47		Crippen Method
logp	5.611		Crippen Method
mcvol	316.380	ml/mol	McGowan Method
pc	1320.39	kPa	Joback Method
rinpol	2722.00		NIST Webbook
rinpol	2722.00		NIST Webbook
tb	953.58	K	Joback Method
tc	1178.60	K	Joback Method
tf	527.40	K	Joback Method
vc	1.200	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1018.62	J/mol×K	953.58	Joback Method
cpg	1033.30	J/mol×K	991.08	Joback Method
cpg	1046.55	J/mol×K	1028.59	Joback Method
cpg	1058.45	J/mol×K	1066.09	Joback Method
cpg	1069.04	J/mol×K	1103.59	Joback Method
cpg	1078.40	J/mol×K	1141.10	Joback Method
cpg	1086.58	J/mol×K	1178.60	Joback Method
dvisc	0.0004803	Pa×s	527.40	Joback Method

dvisc	0.0002210	Pa×s	598.43	Joback Method
dvisc	0.0001199	Pa×s	669.46	Joback Method
dvisc	0.0000731	Pa×s	740.49	Joback Method
dvisc	0.0000487	Pa×s	811.52	Joback Method
dvisc	0.0000346	Pa×s	882.55	Joback Method
dvisc	0.0000258	Pa×s	953.58	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=U390169&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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