Cyclopropanecarboxylic acid, trans-2-phenyl-, pentadec-3-yl ester

Inchi: InChI=1S/C25H40O2/c1-3-5-6-7-8-9-10-11-12-16-19-22(4-2)27-25(26)24-20-23(24)21-17
InchiKey: LLXGTHNNYVTIHV-UHFFFAOYSA-N
Formula: C25H40O2
SMILES: CCCCCCCCCCCCC(CC)OC(=O)C1CC1c1ccccc1
Mol. weight [g/mol]: 372.58

Physical Properties

Property code	Value	Unit	Source
gf	88.71	kJ/mol	Joback Method
hf	-520.42	kJ/mol	Joback Method
hfus	53.02	kJ/mol	Joback Method
hvap	81.89	kJ/mol	Joback Method
log10ws	-7.98		Crippen Method
logp	7.423		Crippen Method
mcvol	335.930	ml/mol	McGowan Method
pc	1016.83	kPa	Joback Method
rinpol	2708.00		NIST Webbook
rinpol	2708.00		NIST Webbook
tb	876.00	K	Joback Method
tc	1078.33	K	Joback Method
tf	468.79	K	Joback Method
vc	1.302	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1117.57	J/mol×K	876.00	Joback Method
cpg	1205.72	J/mol×K	1044.60	Joback Method
cpg	1190.24	J/mol×K	1010.88	Joback Method
cpg	1173.76	J/mol×K	977.16	Joback Method
cpg	1156.20	J/mol×K	943.44	Joback Method
cpg	1137.50	J/mol×K	909.72	Joback Method
cpg	1220.28	J/mol×K	1078.33	Joback Method
dvisc	0.0001393	Pa×s	876.00	Joback Method

dvisc	0.0001744	Pa×s	808.13	Joback Method
dvisc	0.0002274	Pa×s	740.26	Joback Method
dvisc	0.0003129	Pa×s	672.39	Joback Method
dvisc	0.0004624	Pa×s	604.53	Joback Method
dvisc	0.0007545	Pa×s	536.66	Joback Method
dvisc	0.0014187	Pa×s	468.79	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U406258&Units=SI

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