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

Inchi: InChI=1S/C24H38O2/c1-3-5-6-7-8-9-10-11-15-18-21(4-2)26-24(25)23-19-22(23)20-16-13

InchiKey: GYHJDRFCXKSFHE-UHFFFAOYSA-N

Formula: C24H38O2

SMILES: CCCCCCCCCCCC(CC)OC(=O)C1CC1c1ccccc1

Mol. weight [g/mol]: 358.56

Physical Properties

Property code	Value	Unit	Source
gf	80.29	kJ/mol	Joback Method
hf	-499.78	kJ/mol	Joback Method
hfus	50.43	kJ/mol	Joback Method
hvap	79.67	kJ/mol	Joback Method
log10ws	-7.56		Crippen Method
logp	7.033		Crippen Method
mcvol	321.840	ml/mol	McGowan Method
pc	1082.06	kPa	Joback Method
rinpol	2606.00		NIST Webbook
rinpol	2606.00		NIST Webbook
tb	853.12	K	Joback Method
tc	1053.89	K	Joback Method
tf	457.52	K	Joback Method
vc	1.246	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1055.39	J/mol×K	853.12	Joback Method
cpg	1075.11	J/mol×K	886.58	Joback Method
cpg	1093.63	J/mol×K	920.04	Joback Method
cpg	1111.02	J/mol×K	953.51	Joback Method
cpg	1127.35	J/mol×K	986.97	Joback Method
cpg	1142.69	J/mol×K	1020.43	Joback Method
cpg	1157.10	J/mol×K	1053.89	Joback Method
dvisc	0.0015335	Pa×s	457.52	Joback Method

dvisc	0.0008262	Pa×s	523.45	Joback Method
dvisc	0.0005112	Pa×s	589.39	Joback Method
dvisc	0.0003484	Pa×s	655.32	Joback Method
dvisc	0.0002547	Pa×s	721.25	Joback Method
dvisc	0.0001962	Pa×s	787.19	Joback Method
dvisc	0.0001574	Pa×s	853.12	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=U406254&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