

Cyclopropanecarboxylic acid, trans-2-phenyl-, tetradec-4-yl ester

Inchi:	InChI=1S/C24H38O2/c1-3-5-6-7-8-9-10-14-18-21(15-4-2)26-24(25)23-19-22(23)20-16-12
InchiKey:	BWUMORXJWYCCON-UHFFFAOYSA-N
Formula:	C24H38O2
SMILES:	CCCCCCCCCCC(CCC)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
mvol	321.840	ml/mol	McGowan Method
pc	1082.06	kPa	Joback Method
rinpol	2582.00		NIST Webbook
rinpol	2582.00		NIST Webbook
tb	853.12	K	Joback Method
tc	1053.89	K	Joback Method
tf	457.52	K	Joback Method
vc	1.246	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1055.39	J/molxK	853.12	Joback Method
cpg	1142.69	J/molxK	1020.43	Joback Method
cpg	1127.35	J/molxK	986.97	Joback Method
cpg	1111.02	J/molxK	953.51	Joback Method
cpg	1093.63	J/molxK	920.04	Joback Method
cpg	1075.11	J/molxK	886.58	Joback Method
cpg	1157.10	J/molxK	1053.89	Joback Method
dvisc	0.0001574	Paxs	853.12	Joback Method

dvisc	0.0001962	Paxs	787.19	Joback Method
dvisc	0.0002547	Paxs	721.25	Joback Method
dvisc	0.0003484	Paxs	655.32	Joback Method
dvisc	0.0005112	Paxs	589.39	Joback Method
dvisc	0.0008262	Paxs	523.45	Joback Method
dvisc	0.0015335	Paxs	457.52	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=U406255&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cp_g:	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:	Log ₁₀ 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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