

Cyclopropanecarboxylic acid, trans-2-phenyl-, tetradecyl ester

Inchi:	InChI=1S/C24H38O2/c1-2-3-4-5-6-7-8-9-10-11-12-16-19-26-24(25)23-20-22(23)21-17-14
InchiKey:	QRIXECAJHIXVEX-UHFFFAOYSA-N
Formula:	C24H38O2
SMILES:	CCCCCCCCCCCCCOC(=O)C1CC1c1ccccc1
Mol. weight [g/mol]:	358.56

Physical Properties

Property code	Value	Unit	Source
gf	82.73	kJ/mol	Joback Method
hf	-494.50	kJ/mol	Joback Method
hfus	53.95	kJ/mol	Joback Method
hvap	80.05	kJ/mol	Joback Method
log10ws	-7.45		Crippen Method
logp	7.034		Crippen Method
mcvol	321.840	ml/mol	McGowan Method
pc	1076.39	kPa	Joback Method
rinsol	2761.00		NIST Webbook
tb	853.56	K	Joback Method
tc	1052.88	K	Joback Method
tf	472.52	K	Joback Method
vc	1.252	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1054.93	J/molxK	853.56	Joback Method
cpg	1074.52	J/molxK	886.78	Joback Method
cpg	1092.94	J/molxK	920.00	Joback Method
cpg	1110.26	J/molxK	953.22	Joback Method
cpg	1126.54	J/molxK	986.44	Joback Method
cpg	1141.85	J/molxK	1019.66	Joback Method
cpg	1156.26	J/molxK	1052.88	Joback Method
dvisc	0.0013849	Paxs	472.52	Joback Method
dvisc	0.0007960	Paxs	536.03	Joback Method

dvisc	0.0005145	Paxs	599.53	Joback Method
dvisc	0.0003616	Paxs	663.04	Joback Method
dvisc	0.0002702	Paxs	726.55	Joback Method
dvisc	0.0002117	Paxs	790.05	Joback Method
dvisc	0.0001719	Paxs	853.56	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=U406005&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
mccvol:	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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