

Cyclopentanecarboxylic acid, 3,5-dimethylphenyl ester

Inchi:	InChI=1S/C14H18O2/c1-10-7-11(2)9-13(8-10)16-14(15)12-5-3-4-6-12/h7-9,12H,3-6H2,1
InchiKey:	OAWMOISULVJMCJ-UHFFFAOYSA-N
Formula:	C14H18O2
SMILES:	<chem>Cc1cc(C)cc(OC(=O)C2CCCC2)c1</chem>
Mol. weight [g/mol]:	218.29

Physical Properties

Property code	Value	Unit	Source
gf	-37.22	kJ/mol	Joback Method
hf	-303.02	kJ/mol	Joback Method
hfus	22.00	kJ/mol	Joback Method
hvap	59.77	kJ/mol	Joback Method
log10ws	-4.06		Crippen Method
logp	3.399		Crippen Method
mvol	180.940	ml/mol	McGowan Method
pc	2414.74	kPa	Joback Method
rinpol	1679.00		NIST Webbook
tb	647.93	K	Joback Method
tc	877.34	K	Joback Method
tf	382.06	K	Joback Method
vc	0.676	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	482.94	J/molxK	647.93	Joback Method
cpg	501.10	J/molxK	686.16	Joback Method
cpg	518.06	J/molxK	724.40	Joback Method
cpg	533.84	J/molxK	762.63	Joback Method
cpg	548.49	J/molxK	800.87	Joback Method
cpg	562.04	J/molxK	839.10	Joback Method
cpg	574.52	J/molxK	877.34	Joback Method
dvisc	0.0015210	Paxs	382.06	Joback Method
dvisc	0.0009224	Paxs	426.37	Joback Method

dvisc	0.0006146	Paxs	470.68	Joback Method
dvisc	0.0004391	Paxs	515.00	Joback Method
dvisc	0.0003309	Paxs	559.31	Joback Method
dvisc	0.0002600	Paxs	603.62	Joback Method
dvisc	0.0002111	Paxs	647.93	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=U307576&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

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