

Cyclopentane, 1,2-dimethoxy-,cis-

Inchi:	InChI=1S/C7H14O2/c1-8-6-4-3-5-7(6)9-2/h6-7H,3-5H2,1-2H3/t6-,7+
InchiKey:	YLBQPTZQSYROOF-KNVOCYPGSA-N
Formula:	C7H14O2
SMILES:	COC1CCCC1OC
Mol. weight [g/mol]:	130.18
CAS:	61011-51-6

Physical Properties

Property code	Value	Unit	Source
gf	-173.10	kJ/mol	Joback Method
hf	-412.11	kJ/mol	Joback Method
hfus	11.27	kJ/mol	Joback Method
hvap	35.94	kJ/mol	Joback Method
ie	9.29	eV	NIST Webbook
ie	8.60	eV	NIST Webbook
log10ws	-1.05		Crippen Method
logp	1.200		Crippen Method
mcvol	110.370	ml/mol	McGowan Method
pc	3166.83	kPa	Joback Method
tb	415.01	K	Joback Method
tc	607.96	K	Joback Method
tf	219.77	K	Joback Method
vc	0.404	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	224.23	J/molxK	415.01	Joback Method
cpg	238.85	J/molxK	447.17	Joback Method
cpg	252.97	J/molxK	479.33	Joback Method
cpg	266.58	J/molxK	511.48	Joback Method
cpg	279.68	J/molxK	543.64	Joback Method
cpg	292.26	J/molxK	575.80	Joback Method
cpg	304.32	J/molxK	607.96	Joback Method

dvisc	0.0015889	Paxs	219.77	Joback Method
dvisc	0.0009497	Paxs	252.31	Joback Method
dvisc	0.0006385	Paxs	284.85	Joback Method
dvisc	0.0004657	Paxs	317.39	Joback Method
dvisc	0.0003602	Paxs	349.93	Joback Method
dvisc	0.0002910	Paxs	382.47	Joback Method
dvisc	0.0002431	Paxs	415.01	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C61011516&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
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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