

# 1-Cyclopentene-1-carboxylic acid, methyl ester

Inchi:	InChI=1S/C7H10O2/c1-9-7(8)6-4-2-3-5-6/h4H,2-3,5H2,1H3
InchiKey:	VTYCAXIAUKEGBQ-UHFFFAOYSA-N
Formula:	C7H10O2
SMILES:	COC(=O)C1=CCCC1
Mol. weight [g/mol]:	126.15
CAS:	25662-28-6

## Physical Properties

Property code	Value	Unit	Source
gf	-161.27	kJ/mol	Joback Method
hf	-305.48	kJ/mol	Joback Method
hfus	10.37	kJ/mol	Joback Method
hvap	41.85	kJ/mol	Joback Method
log10ws	-1.36		Crippen Method
logp	1.270		Crippen Method
mcvol	101.770	ml/mol	McGowan Method
pc	3857.88	kPa	Joback Method
tb	459.94	K	Joback Method
tc	670.06	K	Joback Method
tf	269.23	K	Joback Method
vc	0.380	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	205.84	J/mol×K	459.94	Joback Method
cpg	217.85	J/mol×K	494.96	Joback Method
cpg	229.24	J/mol×K	529.98	Joback Method
cpg	240.04	J/mol×K	565.00	Joback Method
cpg	250.25	J/mol×K	600.02	Joback Method
cpg	259.90	J/mol×K	635.04	Joback Method
cpg	269.00	J/mol×K	670.06	Joback Method
dvisc	0.0025002	Paxs	269.23	Joback Method
dvisc	0.0014728	Paxs	301.01	Joback Method

dvisc	0.0009598	Paxs	332.80	Joback Method
dvisc	0.0006740	Paxs	364.59	Joback Method
dvisc	0.0005009	Paxs	396.37	Joback Method
dvisc	0.0003890	Paxs	428.15	Joback Method
dvisc	0.0003129	Paxs	459.94	Joback Method

## Sources

<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C25662286&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C25662286&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mccvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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