1,2-Dimethyl-3-carbomethoxycyclopropene

Inchi: InChI=1S/C7H10O2/c1-4-5(2)6(4)7(8)9-3/h6H,1-3H3
InchiKey: IKBRSONWVHPZBT-UHFFFAOYSA-N
Formula: C7H10O2
SMILES: COC(=O)C1C(C)=C1C
Mol. weight [g/mol]: 126.15
CAS: 20939-00-8

Physical Properties

Property code	Value	Unit	Source
gf	-154.41	kJ/mol	Joback Method
hf	-324.97	kJ/mol	Joback Method
hfus	15.25	kJ/mol	Joback Method
hvap	41.86	kJ/mol	Joback Method
log10ws	-1.12		Crippen Method
logp	1.126		Crippen Method
mcvol	101.770	ml/mol	McGowan Method
pc	3427.87	kPa	Joback Method
tb	451.71	K	Joback Method
tc	647.10	K	Joback Method
tf	284.55	K	Joback Method
vc	0.395	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	209.92	J/mol×K	451.71	Joback Method
cpg	220.11	J/mol×K	484.27	Joback Method
cpg	229.85	J/mol×K	516.84	Joback Method
cpg	239.16	J/mol×K	549.40	Joback Method
cpg	248.04	J/mol×K	581.97	Joback Method
cpg	256.52	J/mol×K	614.53	Joback Method
cpg	264.60	J/mol×K	647.10	Joback Method
dvisc	0.0009206	Pa×s	284.55	Joback Method
dvisc	0.0007571	Pa×s	312.41	Joback Method

dvisc	0.0006429	Pa×s	340.27	Joback Method
dvisc	0.0005597	Pa×s	368.13	Joback Method
dvisc	0.0004968	Pa×s	395.99	Joback Method
dvisc	0.0004479	Pa×s	423.85	Joback Method
dvisc	0.0004090	Pa×s	451.71	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=C20939008&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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