

# Ethyl 2,2,3,3-tetramethylcyclopropane-carboxylate

Inchi: InChI=1S/C10H18O2/c1-6-12-8(11)7-9(2,3)10(7,4)5/h7H,6H2,1-5H3

InchiKey: JGWIOJNKGNJJLE-UHFFFAOYSA-N

Formula: C10H18O2

SMILES: CCOC(=O)C1C(C)(C)C1(C)C

Mol. weight [g/mol]: 170.25

CAS: 771-10-8

## Physical Properties

Property code	Value	Unit	Source
gf	-166.25	kJ/mol	Joback Method
hf	-431.93	kJ/mol	Joback Method
hfus	12.12	kJ/mol	Joback Method
hvap	44.00	kJ/mol	Joback Method
log10ws	-2.04		Crippen Method
logp	2.232		Crippen Method
mcvol	148.340	ml/mol	McGowan Method
pc	2555.92	kPa	Joback Method
tb	502.37	K	Joback Method
tc	701.76	K	Joback Method
tf	331.88	K	Joback Method
vc	0.571	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	355.76	J/molxK	502.37	Joback Method
cpg	371.44	J/molxK	535.60	Joback Method
cpg	386.08	J/molxK	568.83	Joback Method
cpg	399.84	J/molxK	602.06	Joback Method
cpg	412.88	J/molxK	635.30	Joback Method
cpg	425.32	J/molxK	668.53	Joback Method
cpg	437.34	J/molxK	701.76	Joback Method

# Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	349.70	K	2.00	NIST Webbook

## Sources

McGowan Method:	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
NIST Webbook:	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C771108&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C771108&amp;Units=SI</a>
Crippen Method:	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
Crippen Method:	<a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>
Joback Method:	<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>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>mvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tbrp:</b>	Boiling point at reduced pressure
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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