

Ethyl 2-methylcyclopropanecarboxylate

Other names:	Cyclopropanecarboxylic acid, 2-methyl-, ethyl ester
Inchi:	InChI=1S/C7H12O2/c1-3-9-7(8)6-4-5(6)2/h5-6H,3-4H2,1-2H3
InchiKey:	JWYSLVLBKXDZCW-UHFFFAOYSA-N
Formula:	C7H12O2
SMILES:	CCOC(=O)C1CC1C
Mol. weight [g/mol]:	128.17
CAS:	20913-25-1

Physical Properties

Property code	Value	Unit	Source
gf	-172.82	kJ/mol	Joback Method
hf	-380.15	kJ/mol	Joback Method
hfus	15.88	kJ/mol	Joback Method
hvap	39.94	kJ/mol	Joback Method
log10ws	-1.03		Crippen Method
logp	1.205		Crippen Method
mcvol	106.070	ml/mol	McGowan Method
pc	3276.53	kPa	Joback Method
tb	437.92	K	Joback Method
tc	628.34	K	Joback Method
tf	254.51	K	Joback Method
vc	0.407	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	223.99	J/molxK	437.92	Joback Method
cpg	281.21	J/molxK	596.60	Joback Method
cpg	270.83	J/molxK	564.86	Joback Method
cpg	259.94	J/molxK	533.13	Joback Method
cpg	248.51	J/molxK	501.39	Joback Method
cpg	236.53	J/molxK	469.66	Joback Method
cpg	291.08	J/molxK	628.34	Joback Method
dvisc	0.0004500	Paxs	437.92	Joback Method

dvisc	0.0004966	Paxs	407.35	Joback Method
dvisc	0.0005568	Paxs	376.78	Joback Method
dvisc	0.0006370	Paxs	346.21	Joback Method
dvisc	0.0007480	Paxs	315.65	Joback Method
dvisc	0.0009091	Paxs	285.08	Joback Method
dvisc	0.0011580	Paxs	254.51	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	350.20	K	9.10	NIST Webbook

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C20913251&Units=SI
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

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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume

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