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	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	223.99	J/mol×K	437.92	Joback Method
cpg	236.53	J/mol×K	469.66	Joback Method
cpg	248.51	J/mol×K	501.39	Joback Method
cpg	259.94	J/mol×K	533.13	Joback Method
cpg	270.83	J/mol×K	564.86	Joback Method
cpg	281.21	J/mol×K	596.60	Joback Method
cpg	291.08	J/mol×K	628.34	Joback Method
dvisc	0.0011580	Pa×s	254.51	Joback Method

dvisc	0.0009091	Pa×s	285.08	Joback Method
dvisc	0.0007480	Pa×s	315.65	Joback Method
dvisc	0.0006370	Pa×s	346.21	Joback Method
dvisc	0.0005568	Pa×s	376.78	Joback Method
dvisc	0.0004966	Pa×s	407.35	Joback Method
dvisc	0.0004500	Pa×s	437.92	Joback Method

Pressure Dependent Properties

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

Sources

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=C20913251&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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

Latest version available from:

https://www.chemeo.com/cid/15-007-7/Ethyl-2-methylcyclopropanecarboxylate.pdf

Generated by Cheméo on 2024-10-12 05:54:42.895556492 +0000 UTC m=+3293345.532525750.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.