Acetic acid, methoxy-, ethyl ester

Other names:	Ethyl methoxyacetate
	Methylglycol acetate
	Methoxyacetic acid, ethyl ester
	Ethanol, 2-metoxy-acetate
Inchi:	InChI=1S/C5H10O3/c1-3-8-5(6)4-7-2/h3-4H2,1-2H3
InchiKey:	JLEKJZUYWFJPMB-UHFFFAOYSA-N
Formula:	C5H10O3
SMILES:	CCOC(=O)COC
Mol. weight [g/mol]:	118.13
CAS:	3938-96-3

Physical Properties

Property code	Value	Unit	Source
gf	-347.70	kJ/mol	Joback Method
hf	-523.55	kJ/mol	Joback Method
hfus	12.68	kJ/mol	Joback Method
hvap	38.29	kJ/mol	Joback Method
log10ws	0.13		Crippen Method
logp	0.196		Crippen Method
mcvol	94.620	ml/mol	McGowan Method
pc	3589.94	kPa	Joback Method
rinpol	845.00		NIST Webbook
rinpol	836.00		NIST Webbook
tb	412.51	K	Joback Method
tc	591.12	K	Joback Method
tf	240.50	K	Joback Method
vc	0.357	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	184.32	J/mol×K	412.51	Joback Method
cpg	192.64	J/mol×K	442.28	Joback Method
cpg	200.78	J/mol×K	472.05	Joback Method

cpg	208.73	J/mol×K	501.81	Joback Method
cpg	216.48	J/mol×K	531.58	Joback Method
cpg	224.02	J/mol×K	561.35	Joback Method
cpg	231.33	J/mol×K	591.12	Joback Method
dvisc	0.0022410	Pa×s	240.50	Joback Method
dvisc	0.0012761	Pa×s	269.17	Joback Method
dvisc	0.0008098	Pa×s	297.84	Joback Method
dvisc	0.0005566	Pa×s	326.50	Joback Method
dvisc	0.0004065	Pa×s	355.17	Joback Method
dvisc	0.0003111	Pa×s	383.84	Joback Method
dvisc	0.0002471	Pa×s	412.51	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	317.70	K	1.00	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C3938963&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method: https://en.wikipedia.org/wiki/Joback_method

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume