Ethyl, 1-methoxy-

Inchi: InChI=1S/C3H7O/c1-3-4-2/h3H,1-2H3
InchiKey: JQCSUVJDBHJKNG-UHFFFAOYSA-N
Formula: C3H7O
SMILES: C[CH]OC
Mol. weight [g/mol]: 59.09
CAS: 17030-76-1

Physical Properties

Property code	Value	Unit	Source
gf	-80.68	kJ/mol	Joback Method
hf	-186.94	kJ/mol	Joback Method
hfus	2.87	kJ/mol	Joback Method
hvap	24.15	kJ/mol	Joback Method
ie	6.50	eV	NIST Webbook
log10ws	-0.27		Crippen Method
logp	0.814		Crippen Method
mcvol	56.850	ml/mol	McGowan Method
pc	4621.41	kPa	Joback Method
tb	289.32	K	Joback Method
tc	452.43	K	Joback Method
tf	147.17	K	Joback Method
vc	0.206	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	82.27	J/mol×K	289.32	Joback Method
cpg	88.01	J/mol×K	316.50	Joback Method
cpg	93.51	J/mol×K	343.69	Joback Method
cpg	98.77	J/mol×K	370.87	Joback Method
cpg	103.81	J/mol×K	398.06	Joback Method
cpg	108.64	J/mol×K	425.24	Joback Method
cpg	113.25	J/mol×K	452.43	Joback Method
dvisc	0.0004393	Pa×s	147.17	Joback Method

dvisc	0.0003315	Pa×s	170.86	Joback Method
dvisc	0.0002680	Pa×s	194.55	Joback Method
dvisc	0.0002268	Pa×s	218.25	Joback Method
dvisc	0.0001984	Pa×s	241.94	Joback Method
dvisc	0.0001777	Pa×s	265.63	Joback Method
dvisc	0.0001621	Pa×s	289.32	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C17030761&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
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
ie:	Ionization energy
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