2-Methoxyethyl pentanoate

Inchi: InChI=1S/C8H16O3/c1-3-4-5-8(9)11-7-6-10-2/h3-7H2,1-2H3
InchiKey: ULZNQHVNWQEFFK-UHFFFAOYSA-N
Formula: C8H16O3
SMILES: CCCCC(=O)OCCOC
Mol. weight [g/mol]: 160.21

Physical Properties

Property code	Value	Unit	Source
gf	-322.44	kJ/mol	Joback Method
hf	-585.47	kJ/mol	Joback Method
hfus	20.45	kJ/mol	Joback Method
hvap	44.97	kJ/mol	Joback Method
log10ws	-1.12		Crippen Method
logp	1.366		Crippen Method
mcvol	136.890	ml/mol	McGowan Method
pc	2611.07	kPa	Joback Method
rinpol	1086.00		NIST Webbook
rinpol	1086.00		NIST Webbook
tb	481.15	K	Joback Method
tc	655.74	K	Joback Method
tf	274.31	K	Joback Method
vc	0.525	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	303.83	J/mol×K	481.15	Joback Method
cpg	315.90	J/mol×K	510.25	Joback Method
cpg	327.58	J/mol×K	539.35	Joback Method
cpg	338.89	J/mol×K	568.45	Joback Method
cpg	349.80	J/mol×K	597.55	Joback Method
cpg	360.32	J/mol×K	626.64	Joback Method
cpg	370.44	J/mol×K	655.74	Joback Method
dvisc	0.0024417	Pa×s	274.31	Joback Method

dvisc	0.0012972	Pa×s	308.78	Joback Method
dvisc	0.0007825	Pa×s	343.26	Joback Method
dvisc	0.0005177	Pa×s	377.73	Joback Method
dvisc	0.0003669	Pa×s	412.20	Joback Method
dvisc	0.0002743	Pa×s	446.68	Joback Method
dvisc	0.0002138	Pa×s	481.15	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U367000&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
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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume