2-Methoxyethyl nonanoate

Inchi: InChI=1S/C12H24O3/c1-3-4-5-6-7-8-9-12(13)15-11-10-14-2/h3-11H2,1-2H3
InchiKey: SWYNLZZOIDBOEM-UHFFFAOYSA-N
Formula: C12H24O3
SMILES: CCCCCCCCC(=O)OCCOC
Mol. weight [g/mol]: 216.32

Physical Properties

Property code	Value	Unit	Source
gf	-288.76	kJ/mol	Joback Method
hf	-668.03	kJ/mol	Joback Method
hfus	30.81	kJ/mol	Joback Method
hvap	53.87	kJ/mol	Joback Method
log10ws	-2.80		Crippen Method
logp	2.927		Crippen Method
mcvol	193.250	ml/mol	McGowan Method
pc	1824.72	kPa	Joback Method
rinpol	1506.00		NIST Webbook
rinpol	1477.00		NIST Webbook
tb	572.67	K	Joback Method
tc	742.18	K	Joback Method
tf	319.39	K	Joback Method
vc	0.750	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	492.05	J/mol×K	572.67	Joback Method
cpg	507.51	J/mol×K	600.92	Joback Method
cpg	522.38	J/mol×K	629.17	Joback Method
cpg	536.68	J/mol×K	657.42	Joback Method
cpg	550.39	J/mol×K	685.68	Joback Method
cpg	563.53	J/mol×K	713.93	Joback Method
cpg	576.09	J/mol×K	742.18	Joback Method
dvisc	0.0021740	Pa×s	319.39	Joback Method

dvisc	0.0010734	Pa×s	361.60	Joback Method
dvisc	0.0006143	Pa×s	403.82	Joback Method
dvisc	0.0003907	Pa×s	446.03	Joback Method
dvisc	0.0002687	Pa×s	488.24	Joback Method
dvisc	0.0001962	Pa×s	530.46	Joback Method
dvisc	0.0001500	Pa×s	572.67	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U378251&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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