2-Methoxyethyl nonadecanoate

Inchi: InChI=1S/C22H44O3/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-22(23)25-21-20-2
InchiKey: HYVLJDPISQXICI-UHFFFAOYSA-N
Formula: C22H44O3
SMILES: CCCCCCCCCCCCCCCCCCC(=O)OCCOC
Mol. weight [g/mol]: 356.58

Physical Properties

Property code	Value	Unit	Source
gf	-204.56	kJ/mol	Joback Method
hf	-874.43	kJ/mol	Joback Method
hfus	56.71	kJ/mol	Joback Method
hvap	76.13	kJ/mol	Joback Method
log10ws	-6.98		Crippen Method
logp	6.828		Crippen Method
mcvol	334.150	ml/mol	McGowan Method
pc	917.72	kPa	Joback Method
rinpol	2477.00		NIST Webbook
rinpol	2477.00		NIST Webbook
tb	801.47	K	Joback Method
tc	981.89	K	Joback Method
tf	432.09	K	Joback Method
vc	1.310	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1064.72	J/mol×K	801.47	Joback Method
cpg	1085.20	J/mol×K	831.54	Joback Method
cpg	1104.58	J/mol×K	861.61	Joback Method
cpg	1122.90	J/mol×K	891.68	Joback Method
cpg	1140.17	J/mol×K	921.75	Joback Method
cpg	1156.41	J/mol×K	951.82	Joback Method
cpg	1171.65	J/mol×K	981.89	Joback Method
dvisc	0.0008948	Pa×s	432.09	Joback Method

dvisc	0.0003906	Pa×s	493.65	Joback Method
dvisc	0.0002049	Pa×s	555.22	Joback Method
dvisc	0.0001223	Pa×s	616.78	Joback Method
dvisc	0.0000801	Pa×s	678.34	Joback Method
dvisc	0.0000563	Pa×s	739.91	Joback Method
dvisc	0.0000418	Pa×s	801.47	Joback Method

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=R540702&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume