1-Methyl-2-methoxyethyl caprylate

Inchi: InChI=1S/C12H24O3/c1-4-5-6-7-8-9-12(13)15-11(2)10-14-3/h11H,4-10H2,1-3H3
InchiKey: GPYJTDKJPKCXSY-UHFFFAOYSA-N
Formula: C12H24O3
SMILES: CCCCCCCC(=O)OC(C)COC
Mol. weight [g/mol]: 216.32

Physical Properties

Property code	Value	Unit	Source
gf	-291.20	kJ/mol	Joback Method
hf	-673.31	kJ/mol	Joback Method
hfus	27.29	kJ/mol	Joback Method
hvap	53.48	kJ/mol	Joback Method
log10ws	-2.91		Crippen Method
logp	2.925		Crippen Method
mcvol	193.250	ml/mol	McGowan Method
pc	1837.26	kPa	Joback Method
rinpol	1405.00		NIST Webbook
tb	572.23	K	Joback Method
tc	744.65	K	Joback Method
tf	304.39	K	Joback Method
vc	0.744	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	492.37	J/mol×K	572.23	Joback Method
cpg	565.17	J/mol×K	715.92	Joback Method
cpg	551.82	J/mol×K	687.18	Joback Method
cpg	537.87	J/mol×K	658.44	Joback Method
cpg	523.31	J/mol×K	629.70	Joback Method
cpg	508.15	J/mol×K	600.97	Joback Method
cpg	577.91	J/mol×K	744.65	Joback Method
dvisc	0.0001405	Pa×s	572.23	Joback Method
dvisc	0.0001880	Pa×s	527.59	Joback Method

dvisc	0.0002654	Pa×s	482.95	Joback Method
dvisc	0.0004020	Pa×s	438.31	Joback Method
dvisc	0.0006690	Pa×s	393.67	Joback Method
dvisc	0.0012682	Pa×s	349.03	Joback Method
dvisc	0.0029000	Pa×s	304.39	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=R540113&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