2-Hydroxyethyl caprate

Inchi: InChI=1S/C12H24O3/c1-2-3-4-5-6-7-8-9-12(14)15-11-10-13/h13H,2-11H2,1H3
InchiKey: IGPIBLIHYRGADN-UHFFFAOYSA-N
Formula: C12H24O3
SMILES: CCCCCCCCCC(=O)OCCO
Mol. weight [g/mol]: 216.32

Physical Properties

Property code	Value	Unit	Source
gf	-320.58	kJ/mol	Joback Method
hf	-688.04	kJ/mol	Joback Method
hfus	33.71	kJ/mol	Joback Method
hvap	68.14	kJ/mol	Joback Method
log10ws	-2.97		Crippen Method
logp	2.663		Crippen Method
mcvol	193.250	ml/mol	McGowan Method
pc	2007.30	kPa	Joback Method
rinpol	1595.00		NIST Webbook
rinpol	1595.00		NIST Webbook
tb	642.43	K	Joback Method
tc	808.95	K	Joback Method
tf	357.98	K	Joback Method
vc	0.750	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	530.16	J/mol×K	642.43	Joback Method
cpg	592.71	J/mol×K	781.19	Joback Method
cpg	581.31	J/mol×K	753.44	Joback Method
cpg	569.37	J/mol×K	725.69	Joback Method
cpg	556.86	J/mol×K	697.94	Joback Method
cpg	543.80	J/mol×K	670.18	Joback Method
cpg	603.57	J/mol×K	808.95	Joback Method
dvisc	0.0000535	Pa×s	642.43	Joback Method

dvisc	0.0000829	Pa×s	595.02	Joback Method
dvisc	0.0001385	Pa×s	547.61	Joback Method
dvisc	0.0002551	Pa×s	500.20	Joback Method
dvisc	0.0005340	Pa×s	452.80	Joback Method
dvisc	0.0013282	Pa×s	405.39	Joback Method
dvisc	0.0042058	Pa×s	357.98	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R540455&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