ethyl 5-hydroxyoctanoate

Inchi: InChI=1S/C10H20O3/c1-3-6-9(11)7-5-8-10(12)13-4-2/h9,11H,3-8H2,1-2H3
InchiKey: GIFGDAGRKYHDLN-UHFFFAOYSA-N
Formula: C10H20O3
SMILES: CCCC(O)CCCC(=O)OCC
Mol. weight [g/mol]: 188.26

Physical Properties

Property code	Value	Unit	Source
gf	-339.86	kJ/mol	Joback Method
hf	-652.04	kJ/mol	Joback Method
hfus	25.01	kJ/mol	Joback Method
hvap	63.30	kJ/mol	Joback Method
log10ws	-2.25		Crippen Method
logp	1.881		Crippen Method
mcvol	165.070	ml/mol	McGowan Method
pc	2421.88	kPa	Joback Method
ripol	2030.00		NIST Webbook
tb	596.23	K	Joback Method
tc	765.82	K	Joback Method
tf	320.44	K	Joback Method
vc	0.632	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	428.91	J/mol×K	596.23	Joback Method
cpg	486.60	J/mol×K	737.56	Joback Method
cpg	476.07	J/mol×K	709.29	Joback Method
cpg	465.05	J/mol×K	681.03	Joback Method
cpg	453.52	J/mol×K	652.76	Joback Method
cpg	441.47	J/mol×K	624.50	Joback Method
cpg	496.65	J/mol×K	765.82	Joback Method
dvisc	0.0000721	Pa×s	596.23	Joback Method
dvisc	0.0001158	Pa×s	550.27	Joback Method

dvisc	0.0002026	Pa×s	504.30	Joback Method
dvisc	0.0003966	Pa×s	458.34	Joback Method
dvisc	0.0009018	Pa×s	412.37	Joback Method
dvisc	0.0025198	Pa×s	366.41	Joback Method
dvisc	0.0094549	Pa×s	320.44	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=R319494&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume