

ethyl 3-hydroxydecanoate

Inchi:	InChI=1S/C12H24O3/c1-3-5-6-7-8-9-11(13)10-12(14)15-4-2/h11,13H,3-10H2,1-2H3
InchiKey:	NOAJFMNAQUIPEX-UHFFFAOYSA-N
Formula:	C12H24O3
SMILES:	CCCCCCCC(O)CC(=O)OCC
Mol. weight [g/mol]:	216.32

Physical Properties

Property code	Value	Unit	Source
gf	-323.02	kJ/mol	Joback Method
hf	-693.32	kJ/mol	Joback Method
hfus	30.19	kJ/mol	Joback Method
hvap	67.75	kJ/mol	Joback Method
log10ws	-3.08		Crippen Method
logp	2.661		Crippen Method
mcvol	193.250	ml/mol	McGowan Method
pc	2021.76	kPa	Joback Method
ripol	2102.00		NIST Webbook
ripol	2102.00		NIST Webbook
ripol	2102.00		NIST Webbook
tb	641.99	K	Joback Method
tc	810.69	K	Joback Method
tf	342.98	K	Joback Method
vc	0.745	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	530.60	J/molxK	641.99	Joback Method
cpg	594.01	J/molxK	782.57	Joback Method
cpg	582.49	J/molxK	754.46	Joback Method
cpg	570.39	J/molxK	726.34	Joback Method
cpg	557.72	J/molxK	698.22	Joback Method
cpg	544.46	J/molxK	670.11	Joback Method
cpg	604.99	J/molxK	810.69	Joback Method

dvisc	0.0000498	Paxs	641.99	Joback Method
dvisc	0.0000796	Paxs	592.15	Joback Method
dvisc	0.0001384	Paxs	542.32	Joback Method
dvisc	0.0002691	Paxs	492.49	Joback Method
dvisc	0.0006081	Paxs	442.65	Joback Method
dvisc	0.0016900	Paxs	392.81	Joback Method
dvisc	0.0063203	Paxs	342.98	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
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=R339790&Units=SI

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

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