ethyl tritriacontanoate

Inchi: InChI=1S/C35H70O2/c1-3-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25
InchiKey: NMWSEYQAHKGUDX-UHFFFAOYSA-N
Formula: C35H70O2
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC(=O)OCC
Mol. weight [g/mol]: 522.93

Physical Properties

Property code	Value	Unit	Source
gf	9.90	kJ/mol	Joback Method
hf	-1010.53	kJ/mol	Joback Method
hfus	89.19	kJ/mol	Joback Method
hvap	102.66	kJ/mol	Joback Method
log10ws	-13.34		Crippen Method
logp	12.662		Crippen Method
mcvol	511.450	ml/mol	McGowan Method
pc	486.88	kPa	Joback Method
rinpol	3683.54		NIST Webbook
rinpol	3683.54		NIST Webbook
tb	1076.49	K	Joback Method
tc	1389.63	K	Joback Method
tf	556.37	K	Joback Method
vc	2.019	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1886.65	J/mol×K	1076.49	Joback Method
cpg	1919.16	J/mol×K	1128.68	Joback Method
cpg	1948.44	J/mol×K	1180.87	Joback Method
cpg	1974.78	J/mol×K	1233.06	Joback Method
cpg	1998.46	J/mol×K	1285.25	Joback Method
cpg	2019.77	J/mol×K	1337.44	Joback Method
cpg	2039.01	J/mol×K	1389.63	Joback Method
dvisc	0.0002385	Pa×s	556.37	Joback Method

dvisc	0.0000910	Pa×s	643.06	Joback Method
dvisc	0.0000437	Pa×s	729.74	Joback Method
dvisc	0.0000245	Pa×s	816.43	Joback Method
dvisc	0.0000154	Pa×s	903.12	Joback Method
dvisc	0.0000104	Pa×s	989.80	Joback Method
dvisc	0.0000076	Pa×s	1076.49	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=R437775&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