Ethyl- «gamma»-linolenate

Inchi: InChI=1S/C20H34O2/c1-3-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20(21)22-4-2/h8-9,
InchiKey: MJLYTDAIYLGSRZ-ORZIMQNZSA-N
Formula: C20H34O2
SMILES: CCCCCC=CCC=CCC=CCCCCC(=O)OCC
Mol. weight [g/mol]: 306.48

Physical Properties

Property code	Value	Unit	Source
gf	124.26	kJ/mol	Joback Method
hf	-349.27	kJ/mol	Joback Method
hfus	50.95	kJ/mol	Joback Method
hvap	69.14	kJ/mol	Joback Method
log10ws	-6.62		Crippen Method
logp	6.139		Crippen Method
mcvol	287.200	ml/mol	McGowan Method
pc	1160.08	kPa	Joback Method
ripol	2551.00		NIST Webbook
ripol	2551.00		NIST Webbook
tb	745.77	K	Joback Method
tc	927.85	K	Joback Method
tf	372.08	K	Joback Method
vc	1.119	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	838.59	J/mol×K	745.77	Joback Method
cpg	856.73	J/mol×K	776.12	Joback Method
cpg	874.01	J/mol×K	806.46	Joback Method
cpg	890.45	J/mol×K	836.81	Joback Method
cpg	906.13	J/mol×K	867.15	Joback Method
cpg	921.08	J/mol×K	897.50	Joback Method
cpg	935.36	J/mol×K	927.85	Joback Method
dvisc	0.0013631	Pa×s	372.08	Joback Method

dvisc	0.0005220	Pa×s	434.36	Joback Method
dvisc	0.0002543	Pa×s	496.64	Joback Method
dvisc	0.0001454	Pa×s	558.92	Joback Method
dvisc	0.0000930	Pa×s	621.21	Joback Method
dvisc	0.0000646	Pa×s	683.49	Joback Method
dvisc	0.0000476	Pa×s	745.77	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R337021&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