ethyl (Z)-2,(E)-6-dodecadienoate

Inchi: InChI=1S/C15H26O2/c1-3-5-6-7-8-9-10-11-12-13-15(16)17-14-4-2/h10-13H,3-9,14H2,1-2
InchiKey: UQEHWMHLQKAMSZ-MRBUWEIXSA-N
Formula: C15H26O2
SMILES: CCCCCCCC=CC=CC(=O)OCCC
Mol. weight [g/mol]: 238.37

Physical Properties

Property code	Value	Unit	Source
gf	1.94	kJ/mol	Joback Method
hf	-363.29	kJ/mol	Joback Method
hfus	37.80	kJ/mol	Joback Method
hvap	58.06	kJ/mol	Joback Method
log10ws	-4.67		Crippen Method
logp	4.412		Crippen Method
mcvol	221.050	ml/mol	McGowan Method
pc	1589.81	kPa	Joback Method
ripol	1917.00		NIST Webbook
ripol	1917.00		NIST Webbook
tb	627.21	K	Joback Method
tc	806.06	K	Joback Method
tf	320.81	K	Joback Method
vc	0.860	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	580.18	J/mol×K	627.21	Joback Method
cpg	596.78	J/mol×K	657.02	Joback Method
cpg	612.60	J/mol×K	686.83	Joback Method
cpg	627.67	J/mol×K	716.64	Joback Method
cpg	642.02	J/mol×K	746.45	Joback Method
cpg	655.69	J/mol×K	776.25	Joback Method
cpg	668.70	J/mol×K	806.06	Joback Method
dvisc	0.0022608	Pa×s	320.81	Joback Method

dvisc	0.0009427	Pa×s	371.88	Joback Method
dvisc	0.0004855	Pa×s	422.94	Joback Method
dvisc	0.0002885	Pa×s	474.01	Joback Method
dvisc	0.0001897	Pa×s	525.08	Joback Method
dvisc	0.0001343	Pa×s	576.14	Joback Method
dvisc	0.0001006	Pa×s	627.21	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R417697&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume