(Z)-(Z)-Tetracos-15-en-1-yl icos-11-enoate

Inchi: InChI=1S/C44H84O2/c1-3-5-7-9-11-13-15-17-19-21-22-23-24-25-27-29-31-33-35-37-39-
InchiKey: XMZFOULJKLPCFF-CLFAGFIQSA-N
Formula: C44H84O2
SMILES: CCCCCCCCC=CCCCCCCCCCCCCCCCOC(=O)CCCCCCCCCC=CCCCCCCCC
Mol. weight [g/mol]: 645.14
CAS: 872411-99-9

Physical Properties

Property code	Value	Unit	Source
gf	246.12	kJ/mol	Joback Method
hf	-961.85	kJ/mol	Joback Method
hfus	112.91	kJ/mol	Joback Method
hvap	122.61	kJ/mol	Joback Method
log10ws	-16.81		Crippen Method
logp	15.725		Crippen Method
mcvol	629.660	ml/mol	McGowan Method
pc	357.08	kPa	Joback Method
rinpol	5763.90		NIST Webbook
rinpol	5763.90		NIST Webbook
tb	1290.73	K	Joback Method
tc	1861.65	K	Joback Method
tf	647.64	K	Joback Method
vc	2.483	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2458.73	J/mol×K	1290.73	Joback Method
cpg	2749.63	J/mol×K	1766.50	Joback Method
cpg	2685.60	J/mol×K	1671.35	Joback Method
cpg	2627.30	J/mol×K	1576.19	Joback Method
cpg	2571.93	J/mol×K	1481.04	Joback Method
cpg	2516.67	J/mol×K	1385.88	Joback Method
cpg	2822.21	J/mol×K	1861.65	Joback Method

dvisc	0.0000013	Pa×s	1290.73	Joback Method
dvisc	0.0000018	Pa×s	1183.55	Joback Method
dvisc	0.0000028	Pa×s	1076.37	Joback Method
dvisc	0.0000045	Pa×s	969.18	Joback Method
dvisc	0.0000083	Pa×s	862.00	Joback Method
dvisc	0.0000182	Pa×s	754.82	Joback Method
dvisc	0.0000519	Pa×s	647.64	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=C872411999&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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