Ethanol, 2,2'-[1,2-ethanediylbis(oxy)]bis-, diacetate

Other names:	Triethylene glycol, diacetate
	Triglycol diacetate
	Ethylenebis-(2-oxyethyl acetate)
	Acetic acid, triethylene glycol diester
	Ethanol, 2,2'-ethylenedioxydi-, diacetate
	TDAC
	2,2'-(Ethylenedioxy)di(ethyl acetate)
	2-[2-(2-Acetyloxyethoxy)ethoxy]ethyl acetate
	2,2'-[ethane-1,2-diylbis(oxy)]bisethyl diacetate
Inchi:	InChI=1S/C10H18O6/c1-9(11)15-7-5-13-3-4-14-6-8-16-10(2)12/h3-8H2,1-2H3
InchiKey:	OVOUKWFJRHALDD-UHFFFAOYSA-N
Formula:	C10H18O6
SMILES:	CC(=O)OCCOCCOCCOC(C)=O
Mol. weight [g/mol]:	234.25
CAS:	111-21-7

Physical Properties

Property code	Value	Unit	Source
gf	-644.52	kJ/mol	Joback Method
hf	-1003.77	kJ/mol	Joback Method
hfus	29.61	kJ/mol	Joback Method
hvap	60.99	kJ/mol	Joback Method
log10ws	0.09		Crippen Method
logp	0.146		Crippen Method
mcvol	178.380	ml/mol	McGowan Method
pc	2224.99	kPa	Joback Method
rinpol	1552.00		NIST Webbook
rinpol	1557.00		NIST Webbook
rinpol	1555.00		NIST Webbook
rinpol	1553.00		NIST Webbook
rinpol	1551.00		NIST Webbook
rinpol	1549.00		NIST Webbook
rinpol	1549.00		NIST Webbook
rinpol	1550.00		NIST Webbook
rinpol	1555.90		NIST Webbook
rinpol	1551.00		NIST Webbook
rinpol	1558.00		NIST Webbook

rinpol	1552.00		NIST Webbook
rinpol	1548.00		NIST Webbook
tb	625.62	K	Joback Method
tc	804.43	K	Joback Method
tf	391.24	K	Joback Method
vc	0.679	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	467.17	J/mol×K	625.62	Joback Method
cpg	480.17	J/mol×K	655.42	Joback Method
cpg	492.64	J/mol×K	685.22	Joback Method
cpg	504.57	J/mol×K	715.02	Joback Method
cpg	515.93	J/mol×K	744.82	Joback Method
cpg	526.72	J/mol×K	774.63	Joback Method
cpg	536.90	J/mol×K	804.43	Joback Method
dvisc	0.0009931	Pa×s	391.24	Joback Method
dvisc	0.0005915	Pa×s	430.30	Joback Method
dvisc	0.0003841	Pa×s	469.37	Joback Method
dvisc	0.0002665	Pa×s	508.43	Joback Method
dvisc	0.0001948	Pa×s	547.49	Joback Method
dvisc	0.0001485	Pa×s	586.56	Joback Method
dvisc	0.0001171	Pa×s	625.62	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=C111217&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