9-Tetradecen-1-ol, acetate, (Z)-

Other names:	(9Z)-9-Tetradecenyl acetate
	(Z)-9-Tetradecen-1-ol acetate
	(Z)-9-tetradecyl acetate
	(Z)-tetradec-9-enyl acetate
	9-Tetradecen-1-ol, acetate, (9Z)-
	Z-9-Tetradecen-1-yl acetate
	Z-9-Tetradecenyl acetate
	acetic acid tetradec-9-enyl ester, cis
	cis-9-Tetradecenyl acetate
Inchi:	InChI=1S/C16H30O2/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-18-16(2)17/h6-7H,3-5,8-15H2
InchiKey:	XXPBOEBNDHAAQH-SREVYHEPSA-N
Formula:	C16H30O2
SMILES:	CCCCC=CCCCCCCCCOC(C)=O
Mol. weight [g/mol]:	254.41
CAS:	16725-53-4

Physical Properties

Property code	Value	Unit	Source
gf	-69.86	kJ/mol	Joback Method
hf	-501.15	kJ/mol	Joback Method
hfus	40.18	kJ/mol	Joback Method
hvap	89.10	kJ/mol	NIST Webbook
log10ws	-5.24		Crippen Method
logp	5.027		Crippen Method
mcvol	239.440	ml/mol	McGowan Method
pc	1417.57	kPa	Joback Method
rinpol	1799.00		NIST Webbook
rinpol	1801.00		NIST Webbook
rinpol	1801.00		NIST Webbook
rinpol	1799.00		NIST Webbook
ripol	2142.00		NIST Webbook
ripol	2120.00		NIST Webbook
ripol	2120.00		NIST Webbook
ripol	2142.00		NIST Webbook
tb	645.93	K	Joback Method
tc	818.34	K	Joback Method
tf	337.16	K	Joback Method

vc	0.935	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	655.12	J/mol×K	645.93	Joback Method
cpg	672.59	J/mol×K	674.67	Joback Method
cpg	689.29	J/mol×K	703.40	Joback Method
cpg	705.23	J/mol×K	732.14	Joback Method
cpg	720.44	J/mol×K	760.87	Joback Method
cpg	734.94	J/mol×K	789.61	Joback Method
cpg	748.76	J/mol×K	818.34	Joback Method
dvisc	0.0022449	Pa×s	337.16	Joback Method
dvisc	0.0009605	Pa×s	388.62	Joback Method
dvisc	0.0005012	Pa×s	440.08	Joback Method
dvisc	0.0002997	Pa×s	491.55	Joback Method
dvisc	0.0001976	Pa×s	543.01	Joback Method
dvisc	0.0001400	Pa×s	594.47	Joback Method
dvisc	0.0001048	Pa×s	645.93	Joback Method
hvapt	90.00	kJ/mol	310.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.55271e+01
Coeff. B	-5.21513e+03
Coeff. C	-1.02710e+02
Temperature range (K), min.	444.92
Temperature range (K), max.	613.21

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C16725534&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
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

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
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume