3-Hexene, 1-(1-ethoxyethoxy)-, (Z)-

Other names:	Acetaldehyde, ethyl 3-hexenyl acetal, (Z)-
	Leaf alcohol (ethyl) acetal
	3,5-Dioxa-4-methyl-8-cis-undecene
	3,5-Dioxa-4-methyl-8-undecene (Z)
	Acetaldehyde ethyl cis-3-hexenylacetal
	(Z)-1-Ethoxy-1-(3-hexenyloxy)ethane
	Ethyl cis-3-hexenyl acetal
	cis-3-Hexenyl ethyl acetal
	Ethyl-(cis-3-hexene)yl acetal
	(3Z)-1-(1-Ethoxyethoxy)-3-hexene
	Ethyl (Z)-3-hexenyl acetal
	3-Hexene, 1-(1-ethoxyethoxy)-, (3Z)-
	Ethane, 1-ethoxy-1-(3-hexenyloxy)-, (Z)-
	Leaf acetal
	(Z)-1-(1-ethoxyethoxy)hex-3-ene
Inchi:	InChI=1S/C10H20O2/c1-4-6-7-8-9-12-10(3)11-5-2/h6-7,10H,4-5,8-9H2,1-3H3/b7-6-
InchiKey:	PAEBAEDUARAOSG-SREVYHEPSA-N
Formula:	C10H20O2
SMILES:	CCC=CCCOC(C)OCC
Mol. weight [g/mol]:	172.26
CAS:	28069-74-1

Physical Properties

Property code	Value	Unit	Source
gf	-98.90	kJ/mol	Joback Method
hf	-402.23	kJ/mol	Joback Method
hfus	20.71	kJ/mol	Joback Method
hvap	42.24	kJ/mol	Joback Method
log10ws	-2.64		Crippen Method
logp	2.742		Crippen Method
mcvol	159.200	ml/mol	McGowan Method
pc	2159.31	kPa	Joback Method
rinpol	1094.00		NIST Webbook
rinpol	1095.00		NIST Webbook
ripol	1297.00		NIST Webbook
ripol	1298.00		NIST Webbook
tb	476.76	K	Joback Method

tc	650.07	K	Joback Method
tf	226.84	K	Joback Method
vc	0.606	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	353.11	J/mol×K	476.76	Joback Method
cpg	421.20	J/mol×K	621.18	Joback Method
cpg	408.61	J/mol×K	592.30	Joback Method
cpg	395.52	J/mol×K	563.41	Joback Method
cpg	381.91	J/mol×K	534.53	Joback Method
cpg	367.77	J/mol×K	505.64	Joback Method
cpg	433.28	J/mol×K	650.07	Joback Method
dvisc	0.0001354	Pa×s	476.76	Joback Method
dvisc	0.0001834	Pa×s	435.11	Joback Method
dvisc	0.0002648	Pa×s	393.45	Joback Method
dvisc	0.0004172	Pa×s	351.80	Joback Method
dvisc	0.0007426	Pa×s	310.15	Joback Method
dvisc	0.0015806	Pa×s	268.49	Joback Method
dvisc	0.0044403	Pa×s	226.84	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=C28069741&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume