Propane, 2-(ethenyloxy)-

Other names:	1-Isopropoxyethylene
	2-(Ethenyloxy)propane
	2-(vinyloxy)propane
	CH2=CHOCH(CH3)2
	Ether, isopropyl vinyl
	Isopropoxyethene
	Isopropoxyethylene
	Isopropyl vinyl ether
	Vinyl isopropyl ether
Inchi:	InChI=1S/C5H10O/c1-4-6-5(2)3/h4-5H,1H2,2-3H3
InchiKey:	GNUGVECARVKIPH-UHFFFAOYSA-N
Formula:	C5H10O
SMILES:	C=COC(C)C
Mol. weight [g/mol]:	86.13
CAS:	926-65-8

Physical Properties

Property code	Value	Unit	Source
chl	-3181.00 ± 8.80	kJ/mol	NIST Webbook
chl	-3192.00 ± 0.80	kJ/mol	NIST Webbook
gf	-28.38	kJ/mol	Joback Method
hf	-174.00 ± 2.20	kJ/mol	NIST Webbook
hfl	-205.00 ± 0.80	kJ/mol	NIST Webbook
hfus	5.09	kJ/mol	Joback Method
hvap	31.00 ± 2.00	kJ/mol	NIST Webbook
ie	8.90	eV	NIST Webbook
log10ws	-1.46		Crippen Method
logp	1.555		Crippen Method
mcvol	82.880	ml/mol	McGowan Method
pc	3607.21	kPa	Joback Method
tb	332.46	K	Joback Method
tc	504.28	K	Joback Method
tf	151.58	K	Joback Method
vc	0.308	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	135.00	J/mol×K	332.46	Joback Method
cpg	143.36	J/mol×K	361.10	Joback Method
cpg	151.48	J/mol×K	389.73	Joback Method
cpg	159.34	J/mol×K	418.37	Joback Method
cpg	166.96	J/mol×K	447.01	Joback Method
cpg	174.33	J/mol×K	475.64	Joback Method
cpg	181.47	J/mol×K	504.28	Joback Method
dvisc	0.0045847	Pa×s	151.58	Joback Method
dvisc	0.0017577	Pa×s	181.73	Joback Method
dvisc	0.0008853	Pa×s	211.87	Joback Method
dvisc	0.0005290	Pa×s	242.02	Joback Method
dvisc	0.0003542	Pa×s	272.17	Joback Method
dvisc	0.0002570	Pa×s	302.31	Joback Method
dvisc	0.0001976	Pa×s	332.46	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=C926658&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Legend

chl: Standard liquid enthalpy of combustion

cpg: Ideal gas heat capacity

dvisc: Dynamic viscosity

gf: Standard Gibbs free energy of formation

hf: Enthalpy of formation at standard conditions

hfl: Liquid phase enthalpy of formation at standard conditions

hfus: Enthalpy of fusion at standard conditions

hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume