Ethane, 2-chloro-1,1-diethoxy-

Other names:	Acetaldehyde, chloro-, diethyl acetal
	Chloroacetaldehyde diethyl acetal
	Diethoxyethyl chloride
	Monochloroacetaldehyde diethyl acetal
	2-Chloroacetaldehyde diethyl acetal
	1,1-Diethoxy-2-chloroethane
	2-Chloro-1,1-diethoxyethane
	NSC 8436
Inchi:	InChI=1S/C6H13ClO2/c1-3-8-6(5-7)9-4-2/h6H,3-5H2,1-2H3
InchiKey:	OVXJWSYBABKZMD-UHFFFAOYSA-N
Formula:	C6H13ClO2
SMILES:	CCOC(CCl)OCC
Mol. weight [g/mol]:	152.62
CAS:	621-62-5

Physical Properties

Property code	Value	Unit	Source
gf	-224.73	kJ/mol	Joback Method
hf	-452.63	kJ/mol	Joback Method
hfus	14.35	kJ/mol	Joback Method
hvap	37.77	kJ/mol	Joback Method
log10ws	-1.27		Crippen Method
logp	1.624		Crippen Method
mcvol	119.380	ml/mol	McGowan Method
pc	2899.85	kPa	Joback Method
rinpol	930.00		NIST Webbook
tb	430.60	K	NIST Webbook
tb	430.60 ± 0.50	K	NIST Webbook
tb	430.60 ± 0.50	K	NIST Webbook
tc	595.18	K	Joback Method
tf	216.76	K	Joback Method
vc	0.451	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	230.97	J/mol×K	418.51	Joback Method
cpg	241.18	J/mol×K	447.95	Joback Method
cpg	251.12	J/mol×K	477.40	Joback Method
cpg	260.77	J/mol×K	506.84	Joback Method
cpg	270.13	J/mol×K	536.29	Joback Method
cpg	279.20	J/mol×K	565.73	Joback Method
cpg	287.97	J/mol×K	595.18	Joback Method
dvisc	0.0041771	Pa×s	216.76	Joback Method
dvisc	0.0018339	Pa×s	250.38	Joback Method
dvisc	0.0009784	Pa×s	284.01	Joback Method
dvisc	0.0005962	Pa×s	317.63	Joback Method
dvisc	0.0003995	Pa×s	351.26	Joback Method
dvisc	0.0002871	Pa×s	384.88	Joback Method
dvisc	0.0002175	Pa×s	418.51	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	344.70	K	4.70	NIST Webbook

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C621625&Units=SI

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
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume