Methane, chloromethoxy-

Other names:	CH3OCH2Cl
	CMME
	Chlordimethylether
	Chlormethyl methyl ether
	Chlorodimethyl ether
	Chloromethoxymethane
	Chloromethyl methyl ether
	Ether methylique monochlore
	Ether, chloromethyl methyl
	Ether, dimethyl chloro
	Methoxychloromethane
	Methoxymethyl chloride
	Methyl chloromethyl ether
	Methyl chloromethyl ether, anhydrous
	Monochlorodimethyl ether
	Monochloromethyl methyl ether
	NSC 21208
	Rcra waste number U046
	UN 1239
Inchi:	InChI=1S/C2H5ClO/c1-4-2-3/h2H2,1H3
InchiKey:	XJUZRXYOEPSWMB-UHFFFAOYSA-N
Formula:	C2H5ClO
SMILES:	COCCl
Mol. weight [g/mol]:	80.51
CAS:	107-30-2

Physical Properties

Property code	Value	Unit	Source
gf	-150.97	kJ/mol	Joback Method
hf	-232.57	kJ/mol	Joback Method
hfus	6.32	kJ/mol	Joback Method
hvap	26.84	kJ/mol	Joback Method
ie	10.87	eV	NIST Webbook
ie	10.20	eV	NIST Webbook
log10ws	-0.40		Crippen Method
logp	0.829		Crippen Method
mcvol	57.150	ml/mol	McGowan Method

pc	4665.71	kPa	Joback Method
rinpol	544.00		NIST Webbook
rinpol	542.00		NIST Webbook
rinpol	542.00		NIST Webbook
rinpol	542.00		NIST Webbook
tb	332.30 ± 0.60	K	NIST Webbook
tb	332.30 ± 0.50	K	NIST Webbook
tb	332.70	K	NIST Webbook
tb	329.20	K	NIST Webbook
tc	477.66	K	Joback Method
tf	164.45	K	Joback Method
vc	0.214	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	80.95	J/mol×K	305.01	Joback Method
cpg	84.72	J/mol×K	333.78	Joback Method
cpg	88.44	J/mol×K	362.56	Joback Method
cpg	92.11	J/mol×K	391.33	Joback Method
cpg	95.72	J/mol×K	420.11	Joback Method
cpg	99.27	J/mol×K	448.88	Joback Method
cpg	102.76	J/mol×K	477.66	Joback Method
dvisc	0.0022106	Pa×s	164.45	Joback Method
dvisc	0.0012124	Pa×s	187.88	Joback Method
dvisc	0.0007597	Pa×s	211.30	Joback Method
dvisc	0.0005226	Pa×s	234.73	Joback Method
dvisc	0.0003847	Pa×s	258.16	Joback Method
dvisc	0.0002980	Pa×s	281.58	Joback Method
dvisc	0.0002401	Pa×s	305.01	Joback Method
hvapt	32.20	kJ/mol	311.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.49187e+01

Coeff. B	-2.94139e+03
Coeff. C	-4.36370e+01
Temperature range (K), min.	244.67
Temperature range (K), max.	354.42

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C107302&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
ie:	Ionization energy
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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