

2-Chloroethyl methyl ether

Other names:	Chloroethyl-methyl ether 2-Methoxyethyl chloride Ethane, 1-chloro-2-methoxy- 1-Chloro-2-methoxyethane Methyl 2-chloroethyl ether
Inchi:	InChI=1S/C3H7ClO/c1-5-3-2-4/h2-3H2,1H3
InchiKey:	XTIGGAHUZJWQMD-UHFFFAOYSA-N
Formula:	C3H7ClO
SMILES:	COCCCI
Mol. weight [g/mol]:	94.54
CAS:	627-42-9

Physical Properties

Property code	Value	Unit	Source
gf	-142.55	kJ/mol	Joback Method
hf	-253.21	kJ/mol	Joback Method
hfus	8.91	kJ/mol	Joback Method
hvap	29.07	kJ/mol	Joback Method
ie	10.05	eV	NIST Webbook
log10ws	-0.32		Crippen Method
logp	0.872		Crippen Method
mcvol	71.240	ml/mol	McGowan Method
pc	4109.14	kPa	Joback Method
rinpol	630.20		NIST Webbook
rinpol	645.00		NIST Webbook
rinpol	645.00		NIST Webbook
rinpol	645.00		NIST Webbook
rinpol	645.00		NIST Webbook
rinpol	634.90		NIST Webbook
tb	362.70	K	NIST Webbook
tb	365.70	K	NIST Webbook
tc	501.24	K	Joback Method
tf	175.72	K	Joback Method
vc	0.271	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	108.76	J/mol×K	327.89	Joback Method
cpg	135.20	J/mol×K	472.35	Joback Method
cpg	130.17	J/mol×K	443.46	Joback Method
cpg	125.00	J/mol×K	414.57	Joback Method
cpg	119.71	J/mol×K	385.67	Joback Method
cpg	114.30	J/mol×K	356.78	Joback Method
cpg	140.11	J/mol×K	501.24	Joback Method
dvisc	0.0002569	Pa×s	327.89	Joback Method
dvisc	0.0003222	Pa×s	302.53	Joback Method
dvisc	0.0004213	Pa×s	277.17	Joback Method
dvisc	0.0005814	Pa×s	251.81	Joback Method
dvisc	0.0008624	Pa×s	226.44	Joback Method
dvisc	0.0014128	Pa×s	201.08	Joback Method
dvisc	0.0026692	Pa×s	175.72	Joback Method

Sources

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=C627429&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
ie:	Ionization energy
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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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