1-Propanol, 2-ethoxy-

Other names:	2-Ethoxy-1-propanol
	2-ethoxypropanol
	Propylene glycol monoethyl ether, «alpha»
	Propylene glycol monoethyl ether, Â«alphaÂ»
Inchi:	InChI=1S/C5H12O2/c1-3-7-5(2)4-6/h5-6H,3-4H2,1-2H3
InchiKey:	DEDUBNVYPMOFDR-UHFFFAOYSA-N
Formula:	C5H12O2
SMILES:	CCOC(C)CO
Mol. weight [g/mol]:	104.15
CAS:	19089-47-5

Physical Properties

Property code	Value	Unit	Source
gf	-253.04	kJ/mol	Joback Method
hf	-436.26	kJ/mol	Joback Method
hfus	10.46	kJ/mol	Joback Method
hvap	45.42	kJ/mol	Joback Method
log10ws	-0.38		Crippen Method
logp	0.404		Crippen Method
mcvol	93.050	ml/mol	McGowan Method
pc	3834.03	kPa	Joback Method
rinpol	721.00		NIST Webbook
rinpol	728.00		NIST Webbook
rinpol	779.00		NIST Webbook
rinpol	721.00		NIST Webbook
rinpol	779.00		NIST Webbook
rinpol	754.00		NIST Webbook
tb	427.96	K	Joback Method
tc	593.40	K	Joback Method
tf	214.16	K	Joback Method
vc	0.346	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	191.34	J/mol×K	427.96	Joback Method
cpg	199.79	J/mol×K	455.53	Joback Method
cpg	207.98	J/mol×K	483.11	Joback Method
cpg	215.92	J/mol×K	510.68	Joback Method
cpg	223.60	J/mol×K	538.25	Joback Method
cpg	231.03	J/mol×K	565.83	Joback Method
cpg	238.21	J/mol×K	593.40	Joback Method
dvisc	0.1081645	Pa×s	214.16	Joback Method
dvisc	0.0183815	Pa×s	249.79	Joback Method
dvisc	0.0048625	Pa×s	285.43	Joback Method
dvisc	0.0017280	Pa×s	321.06	Joback Method
dvisc	0.0007551	Pa×s	356.69	Joback Method
dvisc	0.0003835	Pa×s	392.33	Joback Method
dvisc	0.0002180	Pa×s	427.96	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.76895e+01
Coeff. B	-4.53973e+03
Coeff. C	-5.61450e+01
Temperature range (K), min.	317.02
Temperature range (K), max.	422.90

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C19089475&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
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