1-Propanol, 3-ethoxy-

Other names:	3-Ethoxy-1-propanol
	3-Ethoxypropanol
	3-ethoxypropane-1-ol
	Dowanol peat
	Propanol, 3-ethoxy
	Propylene glycol monoethyl ether, «beta»
	Propylene glycol monoethyl ether, Â«betaÂ»
	Propylene glycol «beta»-monoethyl ether
	Propylene glycol Â«betaÂ»-monoethyl ether
Inchi:	InChI=1S/C5H12O2/c1-2-7-5-3-4-6/h6H,2-5H2,1H3
InchiKey:	XHMWPVBQGARKQM-UHFFFAOYSA-N
Formula:	C5H12O2
SMILES:	CCOCCCO
Mol. weight [g/mol]:	104.15
CAS:	111-35-3

Physical Properties

Property code	Value	Unit	Source
gf	-250.60	kJ/mol	Joback Method
hf	-430.98	kJ/mol	Joback Method
hfus	13.98	kJ/mol	Joback Method
hvap	45.81	kJ/mol	Joback Method
log10ws	-0.27		Crippen Method
logp	0.405		Crippen Method
mcvol	93.050	ml/mol	McGowan Method
pc	3796.32	kPa	Joback Method
rinpol	783.00		NIST Webbook
rinpol	816.00		NIST Webbook
ripol	1369.00		NIST Webbook
ripol	1375.00		NIST Webbook
ripol	1364.00		NIST Webbook
ripol	1383.00		NIST Webbook
tb	428.40	K	Joback Method
tc	590.36	K	Joback Method
tf	229.16	K	Joback Method
vc	0.352	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	191.25	J/mol×K	428.40	Joback Method
cpg	199.44	J/mol×K	455.39	Joback Method
cpg	207.39	J/mol×K	482.39	Joback Method
cpg	215.11	J/mol×K	509.38	Joback Method
cpg	222.59	J/mol×K	536.37	Joback Method
cpg	229.83	J/mol×K	563.36	Joback Method
cpg	236.84	J/mol×K	590.36	Joback Method
dvisc	0.0464966	Pa×s	229.16	Joback Method
dvisc	0.0109215	Pa×s	262.37	Joback Method
dvisc	0.0035523	Pa×s	295.57	Joback Method
dvisc	0.0014496	Pa×s	328.78	Joback Method
dvisc	0.0006973	Pa×s	361.99	Joback Method
dvisc	0.0003793	Pa×s	395.19	Joback Method
dvisc	0.0002268	Pa×s	428.40	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.62947e+01
Coeff. B	-4.34338e+03
Coeff. C	-6.17190e+01
Temperature range (K), min.	333.06
Temperature range (K), max.	457.18

Sources

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=C111353&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

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume