Ethanol, 2-(2-butoxyethoxy)-, acetate

Other names:	1-Butoxy-2-(2-acetoxyethoxy)-ethane
	2-(2-Butoxyethoxy)ethanol acetate
	2-(2-Butoxyethoxy)ethyl acetate
	2-(2-Butoxyethoxy)ethylester kyseliny octove
	2-(2-butoxyethoxy)ethyl ethanoate
	Acetic acid 2-(2-butoxyethoxy)ethyl ester
	Butoxyethanol acetate
	Butoxyethoxyethyl acetate
	Butyl carbitol acetate
	Butyl diethylene glycol acetate
	Butyl diglycol acetate
	Butylkarbitolacetat
	DE acetate
	Db acetate
	Dba
	Diethylene glycol butyl ether acetate
	Diethylene glycol mono-n-butyl ether acetate
	Diethylene glycol monobutyl ether acetate
	Diglycol monobutyl ether acetate
	Eastman db acetate
	Ektasolve DB acetate
	Ethanol, 2-(2-butoxyethoxy)-, 1-acetate
	Glycol ether DB aceatate
	NSC 5175
	diethylene glycol acetate butyl ether
	diethylene glycol monobutyl ether ethanoate
Inchi:	InChI=1S/C10H20O4/c1-3-4-5-12-6-7-13-8-9-14-10(2)11/h3-9H2,1-2H3
InchiKey:	VXQBJTKSVGFQOL-UHFFFAOYSA-N
Formula:	C10H20O4
SMILES:	CCCCOCCOCCOC(C)=O
Mol. weight [g/mol]:	204.26
CAS:	124-17-4

Physical Properties

Property code	Value	Unit	Source
gf	-410.60	kJ/mol	Joback Method

hf	-758.97	kJ/mol	Joback Method
hfs	-901.20	kJ/mol	NIST Webbook
hfus	26.82	kJ/mol	Joback Method
hvap	51.83	kJ/mol	Joback Method
log10ws	-1.05		Crippen Method
logp	1.383		Crippen Method
mcvol	170.940	ml/mol	McGowan Method
pc	3150.00 ± 200.00	kPa	NIST Webbook
rinpol	1365.90		NIST Webbook
rinpol	1361.60		NIST Webbook
rinpol	1366.00		NIST Webbook
rinpol	1408.20		NIST Webbook
rinpol	1365.90		NIST Webbook
rinpol	1408.20		NIST Webbook
rinpol	1350.00		NIST Webbook
ripol	1838.00		NIST Webbook
ripol	1838.00		NIST Webbook
tb	518.20	K	NIST Webbook
tc	681.00 ± 3.00	K	NIST Webbook
tf	319.08	K	Joback Method
vc	0.655	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	496.17	J/mol×K	720.68	Joback Method
cpg	420.37	J/mol×K	549.33	Joback Method
cpg	434.18	J/mol×K	577.89	Joback Method
cpg	447.54	J/mol×K	606.45	Joback Method
cpg	460.42	J/mol×K	635.01	Joback Method
cpg	472.83	J/mol×K	663.56	Joback Method
cpg	484.75	J/mol×K	692.12	Joback Method
dvisc	0.0001467	Pa×s	549.33	Joback Method
dvisc	0.0016982	Pa×s	319.08	Joback Method
dvisc	0.0009068	Pa×s	357.45	Joback Method
dvisc	0.0005469	Pa×s	395.83	Joback Method
dvisc	0.0003607	Pa×s	434.20	Joback Method
dvisc	0.0002545	Pa×s	472.58	Joback Method
dvisc	0.0001892	Pa×s	510.95	Joback Method
hvapt	57.70	kJ/mol	456.50	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.69058e+01
Coeff. B	-6.07502e+03
Coeff. C	-2.40440e+01
Temperature range (K), min.	389.61
Temperature range (K), max.	548.01

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=C124174&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
Critical Assessment of CO2 Solubility in Volatile Solvents at 298.15 K:	https://www.doi.org/10.1021/je101161d

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase 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
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