

2-Butoxyethyl acetate

Other names:	1-Acetoxy-2-butoxyethane 2-Butoxyethanol acetate 2-Butoxyethylester kyseliny octove 2-butoxyethyl ethanoate Acetic acid, 2-butoxyethyl ester Butoxyethanol acetate Butoxyethyl acetate Butylcelosolvacetat Butylglycol acetate Ektasolve eb acetate Ethanol, 2-butoxy-, 1-acetate Ethylene glycol mono-n-butyl ether acetate butyl cellosolve acetate butyl glycol acetate ethanol, 2-butoxy-, acetate ethylene glycol butyl ether acetate ethylene glycol monobutyl ether acetate glycol monobutyl ether acetate n-Butyl cellosolve acetate
Inchi:	InChI=1S/C8H16O3/c1-3-4-5-10-6-7-11-8(2)9/h3-7H2,1-2H3
InchiKey:	NQBXSWAWVZHKBZ-UHFFFAOYSA-N
Formula:	C8H16O3
SMILES:	CCCCOCCOC(C)=O
Mol. weight [g/mol]:	160.21
CAS:	112-07-2

Physical Properties

Property code	Value	Unit	Source
gf	-322.44	kJ/mol	Joback Method
hf	-585.47	kJ/mol	Joback Method
hfus	20.45	kJ/mol	Joback Method
hvap	59.54 ± 0.04	kJ/mol	NIST Webbook
hvap	59.50 ± 0.10	kJ/mol	NIST Webbook
log10ws	-1.12		Crippen Method
logp	1.366		Crippen Method
mcvol	136.890	ml/mol	McGowan Method
pc	2694.00 ± 40.00	kPa	NIST Webbook

rhoc	291.58 ± 6.41	kg/m3	NIST Webbook
rinpol	1053.00		NIST Webbook
rinpol	1053.00		NIST Webbook
rinpol	1087.00		NIST Webbook
rinpol	1089.80		NIST Webbook
rinpol	1061.00		NIST Webbook
rinpol	1096.00		NIST Webbook
rinpol	1120.20		NIST Webbook
rinpol	1090.00		NIST Webbook
rinpol	1090.00		NIST Webbook
tb	465.20	K	NIST Webbook
tb	466.20 ± 1.50	K	NIST Webbook
tc	641.20 ± 1.60	K	NIST Webbook
tc	640.20 ± 0.80	K	NIST Webbook
tf	209.70 ± 0.60	K	NIST Webbook
vc	0.525	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	370.44	J/mol×K	655.74	Joback Method
cpg	360.32	J/mol×K	626.64	Joback Method
cpg	349.80	J/mol×K	597.55	Joback Method
cpg	338.89	J/mol×K	568.45	Joback Method
cpg	327.58	J/mol×K	539.35	Joback Method
cpg	315.90	J/mol×K	510.25	Joback Method
cpg	303.83	J/mol×K	481.15	Joback Method
dvisc	0.0012972	Paxs	308.78	Joback Method
dvisc	0.0007825	Paxs	343.26	Joback Method
dvisc	0.0005177	Paxs	377.73	Joback Method
dvisc	0.0003669	Paxs	412.20	Joback Method
dvisc	0.0002743	Paxs	446.68	Joback Method
dvisc	0.0002138	Paxs	481.15	Joback Method
dvisc	0.0024417	Paxs	274.31	Joback Method
hvapt	51.90	kJ/mol	379.00	NIST Webbook
pvap	33.94	kPa	428.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K

pvap	46.80	kPa	438.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	54.64	kPa	443.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	63.48	kPa	448.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	85.24	kPa	458.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	98.36	kPa	463.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	93.70	kPa	463.00	Estimation of Activity Coefficients for the Pairs of the System 2-Ethoxyethanol + 2-Ethoxyethyl Acetate + 2-Butoxyethanol + 2-Butoxyethyl Acetate
pvap	93.60	kPa	463.30	Estimation of Activity Coefficients for the Pairs of the System 2-Ethoxyethanol + 2-Ethoxyethyl Acetate + 2-Butoxyethanol + 2-Butoxyethyl Acetate

pvap	2.92	kPa	363.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	4.57	kPa	373.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	6.72	kPa	383.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	9.96	kPa	393.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	14.42	kPa	403.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	20.44	kPa	413.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	28.85	kPa	423.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K

pvap	93.90	kPa	464.20	Estimation of Activity Coefficients for the Pairs of the System 2-Ethoxyethanol + 2-Ethoxyethyl Acetate + 2-Butoxyethanol + 2-Butoxyethyl Acetate
pvap	39.87	kPa	433.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
rfi	1.41183		298.15	Excess molar volumes and excess molar enthalpies of binary mixtures for 1,2-dichloropropane + 2-alkoxyethanol acetates at 298.15K
rhol	950.40	kg/m3	283.15	Below the room temperature measurements of CO2 solubilities in six physical absorbents
rhol	901.29	kg/m3	333.15	Solubilities of CO2 capture absorbents 2-ethoxyethyl ether, 2-butoxyethyl acetate and 2-(2-ethoxyethoxy)ethyl acetate
rhol	911.18	kg/m3	323.15	Solubilities of CO2 capture absorbents 2-ethoxyethyl ether, 2-butoxyethyl acetate and 2-(2-ethoxyethoxy)ethyl acetate
rhol	921.05	kg/m3	313.15	Solubilities of CO2 capture absorbents 2-ethoxyethyl ether, 2-butoxyethyl acetate and 2-(2-ethoxyethoxy)ethyl acetate

rhol	930.89	kg/m3	303.15	Solubilities of CO ₂ capture absorbents 2-ethoxyethyl ether, 2-butoxyethyl acetate and 2-(2-ethoxyethoxy)ethyl acetate
rhol	940.70	kg/m3	293.15	Solubilities of CO ₂ capture absorbents 2-ethoxyethyl ether, 2-butoxyethyl acetate and 2-(2-ethoxyethoxy)ethyl acetate
rhol	960.40	kg/m3	273.15	Below the room temperature measurements of CO ₂ solubilities in six physical absorbents

Sources

McGowan Method:

**Solubilities of Sulfuryl Fluoride in
2-Butoxyethyl Acetate, 3-Methoxybutyl
Acetate, 2-Methoxyethyl Acetate,
in Molality, Solubility of Sulfuryl Fluoride,
Vapor Pressures of Morpholine, Diethyl
2-Ethoxyethoxyethyl Acetate, Methylmalonate,
Methylmalonate, and Five Glycol Ethers
Excess molar volumes at 298.15 K,
Temperature volumes at 298.15 K,
molar enthalpies of binary mixtures for
Crippen Method:
acetates at 298.15 K:
Crippen Method:**

<http://link.springer.com/article/10.1007/BF02311772>

<https://www.doi.org/10.1021/acs.jced.8b00224>

<https://www.doi.org/10.1021/je101161d>

<https://www.doi.org/10.1021/je049627d>

<https://www.doi.org/10.1016/j.tca.2008.02.008>

<http://pubs.acs.org/doi/abs/10.1021/ci990307l>

<https://www.chemeo.com/doc/models/crippe>

Joback Method:

**Solubilities of CO₂ capture absorbents
2-ethoxyethyl ether, 2-butoxyethyl
Esterate and 2-Butoxyethanol + Acetate
Estimate and Activity Coefficients for
the Pairs of the System
2-Ethoxyethanol + 2-Ethoxyethyl
Acetate + 2-Butoxyethanol +
Below the room temperature
2-Butoxyethyl Acetate
measurements of CO₂ solubilities in
six physical absorbents:**

https://en.wikipedia.org/wiki/Joback_method

<https://www.doi.org/10.1016/j.fluid.2014>

<https://www.doi.org/10.1021/je200565u>

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C11>

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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rfi:	Refractive Index
rhoc:	Critical density
rhol:	Liquid Density
rinpolt:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/38-122-4/2-Butoxyethyl-acetate.pdf>

Generated by Cheméo on 2024-04-09 16:37:22.657129049 +0000 UTC m=+14969891.577706362.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.