

Carbonic acid, butyl ethyl ester

Other names:	Ethyl butyl carbonate Butyl ethyl carbonate
Inchi:	InChI=1S/C7H14O3/c1-3-5-6-10-7(8)9-4-2/h3-6H2,1-2H3
InchiKey:	DISYGAAFCMVRKW-UHFFFAOYSA-N
Formula:	C7H14O3
SMILES:	CCCCOC(=O)OCC
Mol. weight [g/mol]:	146.18
CAS:	30714-78-4

Physical Properties

Property code	Value	Unit	Source
gf	-330.86	kJ/mol	Joback Method
hf	-564.83	kJ/mol	Joback Method
hfus	17.86	kJ/mol	Joback Method
hvap	42.74	kJ/mol	Joback Method
log10ws	-1.68		Crippen Method
logp	1.960		Crippen Method
mcvol	122.800	ml/mol	McGowan Method
pc	2887.40	kPa	Joback Method
rinpol	980.00		NIST Webbook
rinpol	980.00		NIST Webbook
tb	458.27	K	Joback Method
tc	634.29	K	Joback Method
tf	263.04	K	Joback Method
vc	0.469	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	261.73	J/mol×K	458.27	Joback Method
cpg	272.68	J/mol×K	487.61	Joback Method
cpg	283.31	J/mol×K	516.94	Joback Method
cpg	293.62	J/mol×K	546.28	Joback Method
cpg	303.59	J/mol×K	575.61	Joback Method

cpg	313.23	J/mol×K	604.95	Joback Method
cpg	322.52	J/mol×K	634.29	Joback Method
dvisc	0.0024226	Pa×s	263.04	Joback Method
dvisc	0.0013150	Pa×s	295.58	Joback Method
dvisc	0.0008058	Pa×s	328.12	Joback Method
dvisc	0.0005394	Pa×s	360.65	Joback Method
dvisc	0.0003858	Pa×s	393.19	Joback Method
dvisc	0.0002905	Pa×s	425.73	Joback Method
dvisc	0.0002277	Pa×s	458.27	Joback Method

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=C30714784&Units=SI
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
rinpol:	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/92-672-4/Carbonic-acid-butyl-ethyl-ester.pdf>

Generated by Cheméo on 2025-12-23 13:57:08.676658871 +0000 UTC m=+6246426.206699535.

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