

Butyl pentyl carbonate

Inchi:	InChI=1S/C10H20O3/c1-3-5-7-9-13-10(11)12-8-6-4-2/h3-9H2,1-2H3
InchiKey:	FLIHROUXKOLBTC-UHFFFAOYSA-N
Formula:	C10H20O3
SMILES:	CCCCCOC(=O)OCCCC
Mol. weight [g/mol]:	188.26
CAS:	83073-03-4

Physical Properties

Property code	Value	Unit	Source
gf	-305.60	kJ/mol	Joback Method
hf	-626.75	kJ/mol	Joback Method
hfus	25.63	kJ/mol	Joback Method
hvap	49.42	kJ/mol	Joback Method
log10ws	-2.94		Crippen Method
logp	3.130		Crippen Method
mcvol	165.070	ml/mol	McGowan Method
pc	2165.35	kPa	Joback Method
tb	526.91	K	Joback Method
tc	698.72	K	Joback Method
tf	296.85	K	Joback Method
vc	0.637	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	394.21	J/molxK	526.91	Joback Method
cpg	459.09	J/molxK	670.09	Joback Method
cpg	447.09	J/molxK	641.45	Joback Method
cpg	434.61	J/molxK	612.82	Joback Method
cpg	421.63	J/molxK	584.18	Joback Method
cpg	408.16	J/molxK	555.55	Joback Method
cpg	470.59	J/molxK	698.72	Joback Method
dvisc	0.0001822	Paxs	526.91	Joback Method
dvisc	0.0002362	Paxs	488.57	Joback Method

dvisc	0.0003200	Paxs	450.22	Joback Method
dvisc	0.0004589	Paxs	411.88	Joback Method
dvisc	0.0007084	Paxs	373.54	Joback Method
dvisc	0.0012078	Paxs	335.19	Joback Method
dvisc	0.0023638	Paxs	296.85	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C83073034&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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

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