Bis(2-butoxyethyl) phthalate

Other names:	1,2-Benzenedicarboxylic acid, bis(2-butoxyethyl) ester
	Phthalic acid, bis(2-butoxyethyl) ester
	«beta»-Butoxyethyl phthalate
	Butyl glycol phthalate
	Kesscoflex BCP
	Kronisol
	Palatinol K
	di(Butoxyethyl)phthalate
	Butyl "cellosolve" phthalate
	Dibutyl cellosolve phthalate
	Dibutylglycol phthalate
	Ethanol, 2-butoxy-, phthalate (2:1)
	Kesscoflex
	Phthalic acid dibutoxy ethyl ester
	Di-(2-butoxyethyl)ester kyseliny ftalove
	Dibutylcellosolve ftalat
	DBEP
	n-Butyl glycol phthalate
	Plasthall 200DBEP
	Phthalic acid, di(2-butoxyethyl) ester
	bis(2-n-butoxyethyl) phthalate
	bis (butyl glycol) phthalate
	1,2-Benzenedicarboxylic acid, 1,2-bis(2-butoxyethyl) ester
	NSC 4840
	Plasthall DBEP
Inchi:	InChI=1S/C20H30O6/c1-3-5-11-23-13-15-25-19(21)17-9-7-8-10-18(17)20(22)26-16-14-2
InchiKey:	CMCJNODIWQEOAI-UHFFFAOYSA-N
Formula:	C20H30O6
SMILES:	CCCCOCCOC(=O)c1ccccc1C(=O)OCCOCCCC
Mol. weight [g/mol]:	366.45
CAS:	117-83-9

Physical Properties

Property code	Value	Unit	Source
gf	-457.54	kJ/mol	Joback Method
hf	-985.11	kJ/mol	Joback Method

hfus	49.16	kJ/mol	Joback Method
hvap	86.18	kJ/mol	Joback Method
log10ws	-4.32		Crippen Method
logp	3.634		Crippen Method
mcvol	295.520	ml/mol	McGowan Method
pc	1308.95	kPa	Joback Method
rinpol	2485.00		NIST Webbook
rinpol	2496.00		NIST Webbook
rinpol	2484.00		NIST Webbook
rinpol	2486.00		NIST Webbook
rinpol	2485.00		NIST Webbook
rinpol	2485.00		NIST Webbook
rinpol	2486.00		NIST Webbook
rinpol	2486.00		NIST Webbook
rinpol	2488.00		NIST Webbook
rinpol	2496.00		NIST Webbook
rinpol	2484.00		NIST Webbook
tb	886.08	K	Joback Method
tc	1089.73	K	Joback Method
tf	542.88	K	Joback Method
vc	1.131	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	936.21	J/mol×K	886.08	Joback Method
cpg	951.30	J/mol×K	920.02	Joback Method
cpg	965.06	J/mol×K	953.96	Joback Method
cpg	977.51	J/mol×K	987.90	Joback Method
cpg	988.62	J/mol×K	1021.84	Joback Method
cpg	998.40	J/mol×K	1055.79	Joback Method
cpg	1006.86	J/mol×K	1089.73	Joback Method
dvisc	0.0002917	Pa×s	542.88	Joback Method
dvisc	0.0001676	Pa×s	600.08	Joback Method
dvisc	0.0001060	Pa×s	657.28	Joback Method
dvisc	0.0000722	Pa×s	714.48	Joback Method
dvisc	0.0000520	Pa×s	771.68	Joback Method
dvisc	0.0000392	Pa×s	828.88	Joback Method
dvisc	0.0000307	Pa×s	886.08	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=C117839&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