Bis(2-methoxyethyl) phthalate

Other names:	1,2-Benzenedicarboxylic acid, bis(2-methoxyethyl) ester
	Phthalic acid, bis(2-methoxyethyl) ester
	Bis(methoxyethyl) phthalate
	Kesscoflex MCP
	Methyl glycol phthalate
	2-Methoxyethyl phthalate
	di(Methoxyethyl)phthalate
	Dimethylglycol phthalate
	Phthalic acid, di(methoxyethyl) ester
	Di-(2-methoxyethyl)ester kyseliny ftalove
	Di(2-methoxyethyl)phthalate
	DMEP
	Kodaflex DMEP
	Methoxy ethyl phthalate
	Reomol P
	Phthalic acid, di(2-methoxyethyl)ester
	Bis (methylglycol) phthalate
	1,2-Benzenedicarboxylic acid, 1,2-bis(2-methoxyethyl) ester
	NSC 2147
Inchi:	InChI=1S/C14H18O6/c1-17-7-9-19-13(15)11-5-3-4-6-12(11)14(16)20-10-8-18-2/h3-6H,7-
InchiKey:	HSUIVCLOAAJSRE-UHFFFAOYSA-N
Formula:	C14H18O6
SMILES:	COCCOC(=O)c1ccccc1C(=O)OCCOC
Mol. weight [g/mol]:	282.29
CAS:	117-82-8

Physical Properties

Property code	Value	Unit	Source
gf	-508.06	kJ/mol	Joback Method
hf	-861.27	kJ/mol	Joback Method
hfus	33.62	kJ/mol	Joback Method
hvap	72.83	kJ/mol	Joback Method
log10ws	-1.81		Crippen Method
logp	1.293		Crippen Method
mcvol	210.980	ml/mol	McGowan Method
pc	2088.84	kPa	Joback Method
rinpol	1965.00		NIST Webbook

rinpol	1985.00		NIST Webbook
rinpol	1980.00		NIST Webbook
rinpol	1965.00		NIST Webbook
rinpol	2020.00		NIST Webbook
rinpol	1950.00		NIST Webbook
rinpol	1986.00		NIST Webbook
rinpol	1952.00		NIST Webbook
rinpol	1962.00		NIST Webbook
rinpol	1980.00		NIST Webbook
rinpol	1950.00		NIST Webbook
rinpol	1952.00		NIST Webbook
rinpol	1986.00		NIST Webbook
rinpol	1980.00		NIST Webbook
rinpol	2020.00		NIST Webbook
rinpol	1951.00		NIST Webbook
tb	748.80	K	Joback Method
tc	952.07	K	Joback Method
tf	475.26	K	Joback Method
vc	0.795	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	593.40	J/mol×K	748.80	Joback Method
cpg	607.15	J/mol×K	782.68	Joback Method
cpg	619.95	J/mol×K	816.56	Joback Method
cpg	631.79	J/mol×K	850.44	Joback Method
cpg	642.65	J/mol×K	884.31	Joback Method
cpg	652.51	J/mol×K	918.19	Joback Method
cpg	661.35	J/mol×K	952.07	Joback Method
dvisc	0.0005167	Pa×s	475.26	Joback Method
dvisc	0.0003206	Pa×s	520.85	Joback Method
dvisc	0.0002148	Pa×s	566.44	Joback Method
dvisc	0.0001528	Pa×s	612.03	Joback Method
dvisc	0.0001139	Pa×s	657.62	Joback Method
dvisc	0.0000882	Pa×s	703.21	Joback Method
dvisc	0.0000705	Pa×s	748.80	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C117828&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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