Benzene, 1,3-diphenoxy-

Other names:	Benzene, m-diphenoxy-
	m-Diphenoxybenzene
	m-Diphenyloxybenzene
	m-Phenoxyphenoxybenzene
	m-3F2E
	1,3-Diphenoxybenzene
Inchi:	InChI=1S/C18H14O2/c1-3-8-15(9-4-1)19-17-12-7-13-18(14-17)20-16-10-5-2-6-11-16/h1-
InchiKey:	JTNRGGLCSLZOOQ-UHFFFAOYSA-N
Formula:	C18H14O2
SMILES:	c1ccc(Oc2cccc(Oc3ccccc3)c2)cc1
Mol. weight [g/mol]:	262.30
CAS:	3379-38-2

Physical Properties

Property code	Value	Unit	Source
gf	218.28	kJ/mol	Joback Method
hf	18.83	kJ/mol	Joback Method
hfus	26.49	kJ/mol	Joback Method
hvap	67.97	kJ/mol	Joback Method
log10ws	-4.74		Crippen Method
logp	5.271		Crippen Method
mcvol	204.940	ml/mol	McGowan Method
pc	2495.01	kPa	Joback Method
tb	741.10	K	Joback Method
tc	1001.31	K	Joback Method
tf	428.86	K	Joback Method
vc	0.755	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	548.65	J/mol×K	741.10	Joback Method
cpg	617.09	J/mol×K	957.94	Joback Method
cpg	606.27	J/mol×K	914.57	Joback Method

cpg	594.08	J/mol×K	871.20	Joback Method
cpg	580.46	J/mol×K	827.84	Joback Method
cpg	565.34	J/mol×K	784.47	Joback Method
cpg	626.62	J/mol×K	1001.31	Joback Method
dvisc	0.0000761	Pa×s	741.10	Joback Method
dvisc	0.0000962	Pa×s	689.06	Joback Method
dvisc	0.0001264	Pa×s	637.02	Joback Method
dvisc	0.0001742	Pa×s	584.98	Joback Method
dvisc	0.0002557	Pa×s	532.94	Joback Method
dvisc	0.0004077	Pa×s	480.90	Joback Method
dvisc	0.0007282	Pa×s	428.86	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=C3379382&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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume