Benzene, 1,4-diphenoxy-

Other names:	Benzene, p-diphenoxy- p-Diphenoxybenzene p-Phenoxyphenoxybenzene Hydroquinone diphenyl ether 1,4-Diphenoxybenzene 4-Phenoxydiphenyl oxide
Inchi:	InChI=1S/C18H14O2/c1-3-7-15(8-4-1)19-17-11-13-18(14-12-17)20-16-9-5-2-6-10-16/h1-
InchiKey:	UVGPELGZPWDPFP-UHFFFAOYSA-N
Formula:	C18H14O2
SMILES:	c1ccc(Oc2ccc(Oc3ccccc3)cc2)cc1
Mol. weight [g/mol]:	262.30
CAS:	3061-36-7

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
rinpol	357.80		NIST Webbook
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	565.34	J/mol×K	784.47	Joback Method

cpg	580.46	J/mol×K	827.84	Joback Method
cpg	594.08	J/mol×K	871.20	Joback Method
cpg	606.27	J/mol×K	914.57	Joback Method
cpg	617.09	J/mol×K	957.94	Joback Method
cpg	626.62	J/mol×K	1001.31	Joback Method
dvisc	0.0007282	Pa×s	428.86	Joback Method
dvisc	0.0004077	Pa×s	480.90	Joback Method
dvisc	0.0002557	Pa×s	532.94	Joback Method
dvisc	0.0001742	Pa×s	584.98	Joback Method
dvisc	0.0001264	Pa×s	637.02	Joback Method
dvisc	0.0000962	Pa×s	689.06	Joback Method
dvisc	0.0000761	Pa×s	741.10	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	455.00	K	0.30	NIST Webbook

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=C3061367&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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume