Benzene, 1-chloro-4-phenoxy-

Other names:	Ether, p-chlorophenyl phenyl
	p-Chlorodiphenyl oxide
	p-Chlorophenyl phenyl ether
	1-Chloro-4-phenoxybenzene
	4-Chlorodiphenyl ether
	4-Chlorophenyl phenyl ether
Inchi:	InChI=1S/C12H9ClO/c13-10-6-8-12(9-7-10)14-11-4-2-1-3-5-11/h1-9H
InchiKey:	PGPNJCAMHOJTEF-UHFFFAOYSA-N
Formula:	C12H9ClO
SMILES:	Clc1ccc(Oc2ccccc2)cc1
Mol. weight [g/mol]:	204.65
CAS:	7005-72-3

Physical Properties

Property code	Value	Unit	Source
gf	148.42	kJ/mol	Joback Method
hf	22.62	kJ/mol	Joback Method
hfus	19.91	kJ/mol	Joback Method
hvap	54.31	kJ/mol	Joback Method
log10ws	-3.79		Crippen Method
logp	4.132		Crippen Method
mcvol	150.530	ml/mol	McGowan Method
pc	3166.83	kPa	Joback Method
rinpol	1546.50		NIST Webbook
rinpol	1588.00		NIST Webbook
rinpol	1546.50		NIST Webbook
rinpol	270.90		NIST Webbook
rinpol	1588.00		NIST Webbook
tb	592.15	K	Joback Method
tc	843.25	K	Joback Method
tf	342.51	K	Joback Method
vc	0.558	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	328.17	J/mol×K	592.15	Joback Method
cpg	388.95	J/mol×K	801.40	Joback Method
cpg	378.84	J/mol×K	759.55	Joback Method
cpg	367.76	J/mol×K	717.70	Joback Method
cpg	355.65	J/mol×K	675.85	Joback Method
cpg	342.47	J/mol×K	634.00	Joback Method
cpg	398.13	J/mol×K	843.25	Joback Method
dvisc	0.0001652	Pa×s	592.15	Joback Method
dvisc	0.0002065	Pa×s	550.54	Joback Method
dvisc	0.0002678	Pa×s	508.94	Joback Method
dvisc	0.0003636	Pa×s	467.33	Joback Method
dvisc	0.0005242	Pa×s	425.72	Joback Method
dvisc	0.0008182	Pa×s	384.12	Joback Method
dvisc	0.0014227	Pa×s	342.51	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	434.70	K	2.50	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C7005723&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
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