Benzene, (2-propenyloxy)-

Other names:	Ether, allyl phenyl
	Allyl phenoxylate
	Allyl phenyl ether
	Allyloxybenzene
	Phenyl allyl ether
	Phenyl 2-propenyl ether
	3-Phenoxypropene
	Phenylpropenyl ether
	USAF DO-23
	(2-Propenyloxy)benzene
	Benzene, (2-propen-1-yloxy)-
	NSC 4746
Inchi:	InChI=1S/C9H10O/c1-2-8-10-9-6-4-3-5-7-9/h2-7H,1,8H2
InchiKey:	POSICDHOUBKJKP-UHFFFAOYSA-N
Formula:	C9H10O
SMILES:	C=CCOc1ccccc1
Mol. weight [g/mol]:	134.18
CAS:	1746-13-0

Physical Properties

Property code	Value	Unit	Source
chl	-4932.90 ± 2.50	kJ/mol	NIST Webbook
gf	120.15	kJ/mol	Joback Method
hf	0.65	kJ/mol	Joback Method
hfl	-37.70 ± 2.50	kJ/mol	NIST Webbook
hfus	13.01	kJ/mol	Joback Method
hvap	39.64	kJ/mol	Joback Method
log10ws	-2.28		Crippen Method
logp	2.251		Crippen Method
mcvol	115.480	ml/mol	McGowan Method
pc	3356.75	kPa	Joback Method
tb	464.90 ± 0.50	K	NIST Webbook
tb	464.90	K	NIST Webbook
tc	661.54	K	Joback Method
tf	238.08	K	Joback Method
vc	0.430	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	289.58	J/mol×K	661.54	Joback Method
cpg	279.95	J/mol×K	626.46	Joback Method
cpg	269.70	J/mol×K	591.39	Joback Method
cpg	258.81	J/mol×K	556.32	Joback Method
cpg	247.26	J/mol×K	521.25	Joback Method
cpg	235.03	J/mol×K	486.17	Joback Method
cpg	222.10	J/mol×K	451.10	Joback Method
dvisc	0.0024201	Pa×s	238.08	Joback Method
dvisc	0.0002035	Pa×s	451.10	Joback Method
dvisc	0.0002578	Pa×s	415.60	Joback Method
dvisc	0.0003413	Pa×s	380.09	Joback Method
dvisc	0.0004787	Pa×s	344.59	Joback Method
dvisc	0.0007257	Pa×s	309.09	Joback Method
dvisc	0.0012256	Pa×s	273.58	Joback Method
hvapt	49.40	kJ/mol	402.50	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=C1746130&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

chl: Standard liquid enthalpy of combustion
cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions

hfl:	Liquid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
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