Benzene, (ethenyloxy)-

Other names:	Ether, phenyl vinyl
	(Vinyloxy)benzene
	Phenoxyethene
	Phenoxyethylene
	Phenyl vinyl ether
	Vinyl phenyl ether
	Ethenyl phenyl ether
Inchi:	InChI=1S/C8H8O/c1-2-9-8-6-4-3-5-7-8/h2-7H,1H2
InchiKey:	NHOGGUYTANYCGQ-UHFFFAOYSA-N
Formula:	C8H8O
SMILES:	C=COc1ccccc1
Mol. weight [g/mol]:	120.15
CAS:	766-94-9

Physical Properties

Property code	Value	Unit	Source
chl	-4265.20 ± 0.80	kJ/mol	NIST Webbook
chl	-4265.60 ± 9.60	kJ/mol	NIST Webbook
gf	111.73	kJ/mol	Joback Method
hf	23.00 ± 2.20	kJ/mol	NIST Webbook
hfl	-26.00 ± 0.80	kJ/mol	NIST Webbook
hfus	10.42	kJ/mol	Joback Method
hvap	49.00 ± 2.00	kJ/mol	NIST Webbook
log10ws	-2.36		Crippen Method
logp	2.209		Crippen Method
mcvol	101.390	ml/mol	McGowan Method
pc	3763.78	kPa	Joback Method
tb	428.70	K	NIST Webbook
tc	641.38	K	Joback Method
tf	226.81	K	Joback Method
vc	0.374	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	182.54	J/mol×K	428.22	Joback Method
cpg	194.21	J/mol×K	463.75	Joback Method
cpg	205.24	J/mol×K	499.27	Joback Method
cpg	215.65	J/mol×K	534.80	Joback Method
cpg	225.45	J/mol×K	570.33	Joback Method
cpg	234.67	J/mol×K	605.85	Joback Method
cpg	243.33	J/mol×K	641.38	Joback Method
dvisc	0.0022654	Pa×s	226.81	Joback Method
dvisc	0.0011756	Pa×s	260.38	Joback Method
dvisc	0.0007087	Pa×s	293.95	Joback Method
dvisc	0.0004739	Pa×s	327.51	Joback Method
dvisc	0.0003415	Pa×s	361.08	Joback Method
dvisc	0.0002602	Pa×s	394.65	Joback Method
dvisc	0.0002069	Pa×s	428.22	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C766949&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

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
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