Benzene, (1-ethoxyethenyl)-

Other names: «alpha»-Ethoxystyrene
Inchi: InChI=1S/C10H12O/c1-3-11-9(2)10-7-5-4-6-8-10/h4-8H,2-3H2,1H3
InchiKey: PDNJMHZLMGTCDU-UHFFFAOYSA-N
Formula: C10H12O
SMILES: C=C(OCC)c1ccccc1
Mol. weight [g/mol]: 148.20
CAS: 6230-62-2

Physical Properties

Property code	Value	Unit	Source
gf	120.02	kJ/mol	Joback Method
hf	-29.78	kJ/mol	Joback Method
hfus	14.29	kJ/mol	Joback Method
hvap	41.95	kJ/mol	Joback Method
log10ws	-2.71		Crippen Method
logp	2.694		Crippen Method
mcvol	129.570	ml/mol	McGowan Method
pc	3028.94	kPa	Joback Method
rinpol	1166.00		NIST Webbook
tb	473.86	K	Joback Method
tc	685.55	K	Joback Method
tf	235.39	K	Joback Method
vc	0.487	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	263.68	J/mol×K	473.86	Joback Method
cpg	277.96	J/mol×K	509.14	Joback Method
cpg	291.45	J/mol×K	544.42	Joback Method
cpg	304.18	J/mol×K	579.71	Joback Method
cpg	316.18	J/mol×K	614.99	Joback Method
cpg	327.46	J/mol×K	650.27	Joback Method
cpg	338.06	J/mol×K	685.55	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6230622&Units=SI

Legend

cpg:	Ideal gas heat capacity
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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume