4-Ethoxystyrene

Other names:	p-Ethoxystyrene
	Benzene, 1-ethenyl-4-ethoxy-
	p-Vinylphenetole
Inchi:	InChI=1S/C10H12O/c1-3-9-5-7-10(8-6-9)11-4-2/h3,5-8H,1,4H2,2H3
InchiKey:	OBRYRJYZWVLVLF-UHFFFAOYSA-N
Formula:	C10H12O
SMILES:	C=Cc1ccc(OCC)cc1
Mol. weight [g/mol]:	148.20
CAS:	5459-40-5

Physical Properties

Property code	Value	Unit	Source
gf	118.94	kJ/mol	Joback Method
hf	-31.46	kJ/mol	Joback Method
hfus	15.22	kJ/mol	Joback Method
hvap	42.53	kJ/mol	Joback Method
log10ws	-2.83		Crippen Method
logp	2.728		Crippen Method
mcvol	129.570	ml/mol	McGowan Method
pc	2963.34	kPa	Joback Method
tb	478.96	K	Joback Method
tc	687.84	K	Joback Method
tf	261.87	K	Joback Method
vc	0.486	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	264.30	J/mol×K	478.96	Joback Method
cpg	277.93	J/mol×K	513.77	Joback Method
cpg	290.86	J/mol×K	548.59	Joback Method
cpg	303.11	J/mol×K	583.40	Joback Method
cpg	314.70	J/mol×K	618.21	Joback Method
cpg	325.65	J/mol×K	653.02	Joback Method

cpg	335.98	J/mol×K	687.84	Joback Method
dvisc	0.0017608	Pa×s	261.87	Joback Method
dvisc	0.0009678	Pa×s	298.05	Joback Method
dvisc	0.0006055	Pa×s	334.23	Joback Method
dvisc	0.0004152	Pa×s	370.41	Joback Method
dvisc	0.0003045	Pa×s	406.60	Joback Method
dvisc	0.0002349	Pa×s	442.78	Joback Method
dvisc	0.0001884	Pa×s	478.96	Joback Method
hvapt	59.20	kJ/mol	417.50	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	372.70	K	1.50	NIST Webbook

Sources

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=C5459405&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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