«beta»-Ethoxystyrene

Inchi: InChI=1S/C10H12O/c1-2-11-9-8-10-6-4-3-5-7-10/h3-9H,2H2,1H3/b9-8+
InchiKey: FZHNODDFDJBMAS-CMDGGOBGSA-N
Formula: C10H12O
SMILES: CCOC=Cc1ccccc1
Mol. weight [g/mol]: 148.20

Physical Properties

Property code	Value	Unit	Source
gf	120.95	kJ/mol	Joback Method
hf	-28.20	kJ/mol	Joback Method
hfus	17.09	kJ/mol	Joback Method
hvap	42.50	kJ/mol	Joback Method
log10ws	-2.71		Crippen Method
logp	2.694		Crippen Method
mcvol	129.570	ml/mol	McGowan Method
pc	3045.68	kPa	Joback Method
rinpol	1214.00		NIST Webbook
tb	481.46	K	Joback Method
tc	694.56	K	Joback Method
tf	246.03	K	Joback Method
vc	0.485	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	264.19	J/mol×K	481.46	Joback Method
cpg	278.49	J/mol×K	516.98	Joback Method
cpg	291.95	J/mol×K	552.49	Joback Method
cpg	304.62	J/mol×K	588.01	Joback Method
cpg	316.53	J/mol×K	623.53	Joback Method
cpg	327.71	J/mol×K	659.05	Joback Method
cpg	338.19	J/mol×K	694.56	Joback Method
dvisc	0.0025672	Pa×s	246.03	Joback Method
dvisc	0.0011843	Pa×s	285.27	Joback Method

dvisc	0.0006588	Pa×s	324.51	Joback Method
dvisc	0.0004159	Pa×s	363.75	Joback Method
dvisc	0.0002871	Pa×s	402.98	Joback Method
dvisc	0.0002117	Pa×s	442.22	Joback Method
dvisc	0.0001641	Pa×s	481.46	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R318095&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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume