2-Ethoxycinnamic acid

Other names:	o-Ethoxy cinnamic acid
	Propenoic acid, 3-(2-ethoxyphenyl)-
	2-Propenoic acid, 3-(2-ethoxyphenyl)-
	Cinnamic acid, o-ethoxy-
Inchi:	InChI=1S/C11H12O3/c1-2-14-10-6-4-3-5-9(10)7-8-11(12)13/h3-8H,2H2,1H3,(H,12,13)/b8
InchiKey:	UXTDCJJEJZCEBF-BQYQJAHWSA-N
Formula:	C11H12O3
SMILES:	CCOc1ccccc1C=CC(=O)O
Mol. weight [g/mol]:	192.21
CAS:	69038-81-9

Physical Properties

Property code	Value	Unit	Source
chs	-5514.10	kJ/mol	NIST Webbook
gf	-146.00	kJ/mol	Joback Method
hf	-325.12	kJ/mol	Joback Method
hfus	24.98	kJ/mol	Joback Method
hvap	68.81	kJ/mol	Joback Method
log10ws	-2.35		Crippen Method
logp	2.183		Crippen Method
mcvol	151.100	ml/mol	McGowan Method
pc	3199.16	kPa	Joback Method
tb	655.37	K	Joback Method
tc	859.69	K	Joback Method
tf	380.57	K	Joback Method
vc	0.567	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	376.78	J/mol×K	655.37	Joback Method
cpg	387.81	J/mol×K	689.42	Joback Method
cpg	398.16	J/mol×K	723.48	Joback Method
cpg	407.88	J/mol×K	757.53	Joback Method

cpg	416.98	J/mol×K	791.59	Joback Method
cpg	425.49	J/mol×K	825.64	Joback Method
cpg	433.44	J/mol×K	859.69	Joback Method
dvisc	0.0020128	Pa×s	380.57	Joback Method
dvisc	0.0007726	Pa×s	426.37	Joback Method
dvisc	0.0003571	Pa×s	472.17	Joback Method
dvisc	0.0001892	Pa×s	517.97	Joback Method
dvisc	0.0001111	Pa×s	563.77	Joback Method
dvisc	0.0000707	Pa×s	609.57	Joback Method
dvisc	0.0000479	Pa×s	655.37	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C69038819&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

Legend

chs: Standard solid 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
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

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