Benzaldehyde, 3-ethoxy-

Other names: Benzaldehyde, m-ethoxy-
m-Ethoxybenzaldehyde
3-Ethoxybenzaldehyde
Inchi: InChI=1S/C9H10O2/c1-2-11-9-5-3-4-8(6-9)7-10/h3-7H,2H2,1H3
InchiKey: QZMGMXBYJZVAJN-UHFFFAOYSA-N
Formula: C9H10O2
SMILES: CCOc1cccc(C=O)c1
Mol. weight [g/mol]: 150.17
CAS: 22924-15-8

Physical Properties

Property code	Value	Unit	Source
gf	-76.84	kJ/mol	Joback Method
hf	-221.83	kJ/mol	Joback Method
hfus	16.20	kJ/mol	Joback Method
hvap	47.70	kJ/mol	Joback Method
log10ws	-2.25		Crippen Method
logp	1.898		Crippen Method
mcvol	121.350	ml/mol	McGowan Method
pc	3423.86	kPa	Joback Method
tb	508.06	K	Joback Method
tc	719.99	K	Joback Method
tf	294.36	K	Joback Method
vc	0.467	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	257.62	J/mol×K	508.06	Joback Method
cpg	269.51	J/mol×K	543.38	Joback Method
cpg	280.78	J/mol×K	578.70	Joback Method
cpg	291.44	J/mol×K	614.02	Joback Method
cpg	301.51	J/mol×K	649.35	Joback Method
cpg	310.99	J/mol×K	684.67	Joback Method

cpg	319.90	J/mol×K	719.99	Joback Method
dvisc	0.0019322	Pa×s	294.36	Joback Method
dvisc	0.0011334	Pa×s	329.98	Joback Method
dvisc	0.0007377	Pa×s	365.59	Joback Method
dvisc	0.0005181	Pa×s	401.21	Joback Method
dvisc	0.0003855	Pa×s	436.83	Joback Method
dvisc	0.0002999	Pa×s	472.44	Joback Method
dvisc	0.0002417	Pa×s	508.06	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C22924158&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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume