Benzaldehyde, 4-ethoxy-

Other names:	Benzaldehyde, p-ethoxy-
	p-Ethoxybenzaldehyde
	Ethoxybenzaldehyde
	4-Ethoxybenzaldehyde
Inchi:	InChI=1S/C9H10O2/c1-2-11-9-5-3-8(7-10)4-6-9/h3-7H,2H2,1H3
InchiKey:	JRHHJNMASOIRDS-UHFFFAOYSA-N
Formula:	C9H10O2
SMILES:	CCOc1ccc(C=O)cc1
Mol. weight [g/mol]:	150.17
CAS:	10031-82-0

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
rinpol	1302.40		NIST Webbook
rinpol	1301.40		NIST Webbook
rinpol	1308.00		NIST Webbook
rinpol	1308.00		NIST Webbook
rinpol	1310.60		NIST Webbook
rinpol	1301.40		NIST Webbook
tb	522.20	K	NIST Webbook
tb	528.20	K	NIST Webbook
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

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	413.20	K	2.70	NIST Webbook
tbrp	408.00 ± 1.00	K	2.30	NIST Webbook

Sources

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=C10031820&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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