2,3-Dimethyl-para-anisaldehyde

Other names:	Benzaldehyde, 4-methoxy-2,3-dimethyl- 2,3-dimethyl-p-anisaldehyde
Inchi:	InChI=1S/C10H12O2/c1-7-8(2)10(12-3)5-4-9(7)6-11/h4-6H,1-3H3
InchiKey:	MAFDJCNDRCNZFM-UHFFFAOYSA-N
Formula:	C10H12O2
SMILES:	COc1ccc(C=O)c(C)c1C
Mol. weight [g/mol]:	164.20
CAS:	38998-17-3

Physical Properties

Property code	Value	Unit	Source
gf	-87.68	kJ/mol	Joback Method
hf	-265.41	kJ/mol	Joback Method
hfus	18.01	kJ/mol	Joback Method
hvap	51.25	kJ/mol	Joback Method
log10ws	-2.78		Crippen Method
logp	2.125		Crippen Method
mcvol	135.440	ml/mol	McGowan Method
pc	2969.80	kPa	Joback Method
tb	540.90	K	Joback Method
tc	751.75	K	Joback Method
tf	330.67	K	Joback Method
vc	0.522	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	300.74	J/mol×K	540.90	Joback Method
cpg	313.03	J/mol×K	576.04	Joback Method
cpg	324.76	J/mol×K	611.18	Joback Method
cpg	335.93	J/mol×K	646.32	Joback Method
cpg	346.53	J/mol×K	681.46	Joback Method
cpg	356.56	J/mol×K	716.61	Joback Method
cpg	366.03	J/mol×K	751.75	Joback Method

dvisc	0.0011841	Pa×s	330.67	Joback Method
dvisc	0.0007787	Pa×s	365.71	Joback Method
dvisc	0.0005511	Pa×s	400.75	Joback Method
dvisc	0.0004123	Pa×s	435.78	Joback Method
dvisc	0.0003220	Pa×s	470.82	Joback Method
dvisc	0.0002603	Pa×s	505.86	Joback Method
dvisc	0.0002163	Pa×s	540.90	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C38998173&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

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