Benzaldehyde, 4-hydroxy-3,5-dimethoxy-

Other names:	Gallaldehyde 3,5-dimethyl ether
	Syringaldehyde
	Syringic aldehyde
	Syringylaldehyde
	3,5-Dimethoxy-4-hydroxybenzaldehyde
	3,5-Dimethoxy-4-hydroxybenzene carbonal
	4-Hydroxy-3,5-dimethoxybenzaldehyde
	Syringe aldehyde
	Benzaldehyde, 3,5-dimethoxy-4-hydroxy-
	4-Hydroksy-3,5-dwumetoksybenzaldehyd
	Cedar aldehyde
	NSC 41153
	Siringic aldehyde
	Syringa aldehyde
	4-Hydroxy-3,5-dimethoxybenzaldehyde (syringaldehyde)
	4-hydroxy-3,5-methoxybenzaldehyde
Inchi:	InChI=1S/C9H10O4/c1-12-7-3-6(5-10)4-8(13-2)9(7)11/h3-5,11H,1-2H3
InchiKey:	KCDXJAYRVLXPFO-UHFFFAOYSA-N
Formula:	C9H10O4
SMILES:	COc1cc(C=O)cc(OC)c1O
Mol. weight [g/mol]:	182.17
CAS:	134-96-3

Physical Properties

Property code	Value	Unit	Source
gf	-346.09	kJ/mol	Joback Method
hf	-542.83	kJ/mol	Joback Method
hfus	22.78	kJ/mol	Joback Method
hvap	63.78	kJ/mol	Joback Method
log10ws	-1.50		Crippen Method
logp	1.222		Crippen Method
mcvol	133.090	ml/mol	McGowan Method
pc	3945.61	kPa	Joback Method
rinpol	1670.30		NIST Webbook
rinpol	1652.00		NIST Webbook
rinpol	1654.00		NIST Webbook
rinpol	1617.00		NIST Webbook

rinpol	1670.30		NIST Webbook
rinpol	1662.00		NIST Webbook
rinpol	1669.00		NIST Webbook
rinpol	289.60		NIST Webbook
rinpol	1658.00		NIST Webbook
rinpol	1643.00		NIST Webbook
rinpol	1664.00		NIST Webbook
rinpol	1670.00		NIST Webbook
rinpol	289.60		NIST Webbook
rinpol	1667.00		NIST Webbook
ripol	2934.00		NIST Webbook
ripol	2904.00		NIST Webbook
ripol	2930.00		NIST Webbook
ripol	2934.00		NIST Webbook
tb	616.08	K	Joback Method
tc	837.67	K	Joback Method
tf	440.83	K	Joback Method
vc	0.451	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	325.35	J/mol×K	616.08	Joback Method
cpg	335.72	J/mol×K	653.01	Joback Method
cpg	345.52	J/mol×K	689.94	Joback Method
cpg	354.78	J/mol×K	726.88	Joback Method
cpg	363.52	J/mol×K	763.81	Joback Method
cpg	371.79	J/mol×K	800.74	Joback Method
cpg	379.60	J/mol×K	837.67	Joback Method
dvisc	0.0003979	Pa×s	440.83	Joback Method
dvisc	0.0002252	Pa×s	470.04	Joback Method
dvisc	0.0001362	Pa×s	499.25	Joback Method
dvisc	0.0000871	Pa×s	528.45	Joback Method
dvisc	0.0000584	Pa×s	557.66	Joback Method
dvisc	0.0000407	Pa×s	586.87	Joback Method
dvisc	0.0000294	Pa×s	616.08	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	465.70	K	1.90	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C134963&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
rinpol:	Non-polar retention indices
ripol:	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