Anisaldehyde dimethyl acetal

Other names:	p-Anisaldehyde dimethyl acetal
	Benzene, 1-(dimethoxymethyl)-4-methoxy-
	Anisicaldehyde dimethylacetal
	Dimethylacetal anisaldehyde
	p-(dimethoxymethyl)anisole
Inchi:	InChI=1S/C10H14O3/c1-11-9-6-4-8(5-7-9)10(12-2)13-3/h4-7,10H,1-3H3
InchiKey:	NNHYAHOTXLASEA-UHFFFAOYSA-N
Formula:	C10H14O3
SMILES:	COc1ccc(C(OC)OC)cc1
Mol. weight [g/mol]:	182.22
CAS:	2186-92-7

Physical Properties

Property code	Value	Unit	Source
gf	-181.34	kJ/mol	Joback Method
hf	-426.61	kJ/mol	Joback Method
hfus	15.35	kJ/mol	Joback Method
hvap	47.63	kJ/mol	Joback Method
log10ws	-1.94		Crippen Method
logp	1.987		Crippen Method
mcvol	145.610	ml/mol	McGowan Method
pc	2755.56	kPa	Joback Method
tb	526.68	K	Joback Method
tc	732.05	K	Joback Method
tf	293.09	K	Joback Method
vc	0.535	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	330.62	J/mol×K	526.68	Joback Method
cpg	344.77	J/mol×K	560.91	Joback Method
cpg	358.34	J/mol×K	595.14	Joback Method
cpg	371.31	J/mol×K	629.36	Joback Method

cpg	383.67	J/mol×K	663.59	Joback Method
cpg	395.40	J/mol×K	697.82	Joback Method
cpg	406.50	J/mol×K	732.05	Joback Method
dvisc	0.0014750	Pa×s	293.09	Joback Method
dvisc	0.0007659	Pa×s	332.02	Joback Method
dvisc	0.0004563	Pa×s	370.95	Joback Method
dvisc	0.0003000	Pa×s	409.89	Joback Method
dvisc	0.0002121	Pa×s	448.82	Joback Method
dvisc	0.0001585	Pa×s	487.75	Joback Method
dvisc	0.0001236	Pa×s	526.68	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2186927&Units=SI

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