1,3-Dioxolane, 2-(4-methoxyphenyl)-4-methyl-

Other names:	Anisaldehyde propylene glycol acetal
	Anis aldehydepropyleneglycol acetal 1
	2-(4-methoxyphenyl)-4-methyl-1,3-dioxolane
	1,3-Dioxolane, 2-(4-methoxyphenyl)-4-methyl, # 2
Inchi:	InChI=1S/C11H14O3/c1-8-7-13-11(14-8)9-3-5-10(12-2)6-4-9/h3-6,8,11H,7H2,1-2H3
InchiKey:	DTACWEXJFYOAKS-UHFFFAOYSA-N
Formula:	C11H14O3
SMILES:	COc1ccc(C2OCC(C)O2)cc1
Mol. weight [g/mol]:	194.23
CAS:	6414-32-0

Physical Properties

Property code	Value	Unit	Source
gf	-103.88	kJ/mol	Joback Method
hf	-401.39	kJ/mol	Joback Method
hfus	30.05	kJ/mol	Joback Method
hvap	54.40	kJ/mol	Joback Method
log10ws	-2.37		Crippen Method
logp	2.129		Crippen Method
mcvol	148.840	ml/mol	McGowan Method
pc	2934.52	kPa	Joback Method
rinpol	1512.00		NIST Webbook
ripol	2234.00		NIST Webbook
ripol	2234.00		NIST Webbook
tb	569.67	K	Joback Method
tc	798.91	K	Joback Method
tf	334.70	K	Joback Method
vc	0.543	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	375.86	J/mol×K	569.67	Joback Method
cpg	393.15	J/mol×K	607.88	Joback Method

cpg	409.37	J/mol×K	646.08	Joback Method
cpg	424.56	J/mol×K	684.29	Joback Method
cpg	438.72	J/mol×K	722.50	Joback Method
cpg	451.88	J/mol×K	760.70	Joback Method
cpg	464.06	J/mol×K	798.91	Joback Method
dvisc	0.0019113	Pa×s	334.70	Joback Method
dvisc	0.0011703	Pa×s	373.86	Joback Method
dvisc	0.0007864	Pa×s	413.02	Joback Method
dvisc	0.0005661	Pa×s	452.19	Joback Method
dvisc	0.0004295	Pa×s	491.35	Joback Method
dvisc	0.0003394	Pa×s	530.51	Joback Method
dvisc	0.0002770	Pa×s	569.67	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6414320&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
tc: Critical Temperature
tf: Normal melting (fusion) point

vc: Critical Volume