1,3-Dioxole, 4-methyl-

Inchi: InChI=1S/C4H6O2/c1-4-2-5-3-6-4/h2H,3H2,1H3
InchiKey: OHGDYNKEHUBFCC-UHFFFAOYSA-N
Formula: C4H6O2
SMILES: CC1=COCO1
Mol. weight [g/mol]: 86.09
CAS: 14738-96-6

Physical Properties

Property code	Value	Unit	Source
gf	-124.85	kJ/mol	Joback Method
hf	-262.76	kJ/mol	Joback Method
hfus	15.77	kJ/mol	Joback Method
hvap	35.04	kJ/mol	Joback Method
log10ws	-0.91		Crippen Method
logp	0.852		Crippen Method
mcvol	63.800	ml/mol	McGowan Method
pc	5205.63	kPa	Joback Method
tb	368.91	K	Joback Method
tc	573.29	K	Joback Method
tf	216.40	K	Joback Method
vc	0.230	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	111.38	J/mol×K	368.91	Joback Method
cpg	148.43	J/mol×K	539.22	Joback Method
cpg	141.83	J/mol×K	505.16	Joback Method
cpg	134.85	J/mol×K	471.10	Joback Method
cpg	127.45	J/mol×K	437.04	Joback Method
cpg	119.64	J/mol×K	402.97	Joback Method
cpg	154.64	J/mol×K	573.29	Joback Method
dvisc	0.0003953	Pa×s	368.91	Joback Method
dvisc	0.0004981	Pa×s	343.49	Joback Method

dvisc	0.0006513	Pa×s	318.07	Joback Method
dvisc	0.0008921	Pa×s	292.65	Joback Method
dvisc	0.0012974	Pa×s	267.24	Joback Method
dvisc	0.0020415	Pa×s	241.82	Joback Method
dvisc	0.0035731	Pa×s	216.40	Joback Method

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=C14738966&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume