

4-Methylene-1,3-dioxolane

Inchi:	InChI=1S/C4H6O2/c1-4-2-5-3-6-4/h1-3H2
InchiKey:	UMEHTUCYIDSLRJ-UHFFFAOYSA-N
Formula:	C4H6O2
SMILES:	C=C1COCO1
Mol. weight [g/mol]:	86.09
CAS:	4362-24-7

Physical Properties

Property code	Value	Unit	Source
gf	-92.10	kJ/mol	Joback Method
hf	-224.83	kJ/mol	Joback Method
hfus	13.78	kJ/mol	Joback Method
hvap	34.24	kJ/mol	Joback Method
log10ws	-0.41		Crippen Method
logp	0.504		Crippen Method
mvol	63.800	ml/mol	McGowan Method
pc	5190.64	kPa	Joback Method
tb	363.93	K	Joback Method
tc	566.28	K	Joback Method
tf	216.80	K	Joback Method
vc	0.228	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	110.88	J/molxK	363.93	Joback Method
cpg	148.62	J/molxK	532.56	Joback Method
cpg	141.87	J/molxK	498.83	Joback Method
cpg	134.74	J/molxK	465.11	Joback Method
cpg	127.20	J/molxK	431.38	Joback Method
cpg	119.26	J/molxK	397.66	Joback Method
cpg	154.99	J/molxK	566.28	Joback Method
dvisc	0.0004421	Paxs	363.93	Joback Method
dvisc	0.0005552	Paxs	339.41	Joback Method

dvisc	0.0007223	Paxs	314.89	Joback Method
dvisc	0.0009825	Paxs	290.37	Joback Method
dvisc	0.0014144	Paxs	265.84	Joback Method
dvisc	0.0021926	Paxs	241.32	Joback Method
dvisc	0.0037535	Paxs	216.80	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4362247&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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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