

(Z)-CH₃CH₂CH=CH(OCH₃)

Other names:	cis-1-Methoxy-1-butene
Inchi:	InChI=1S/C5H10O/c1-3-4-5-6-2/h4-5H,3H2,1-2H3/b5-4-
InchiKey:	KMQWOHBHEYVPGQJ-PLNGDYQASA-N
Formula:	C ₅ H ₁₀ O
SMILES:	CCC=COC
Mol. weight [g/mol]:	86.13
CAS:	10034-12-5

Physical Properties

Property code	Value	Unit	Source
gf	-33.56	kJ/mol	Joback Method
hf	-161.53	kJ/mol	Joback Method
hfus	10.10	kJ/mol	Joback Method
hvap	29.09	kJ/mol	Joback Method
log10ws	-1.35		Crippen Method
logp	1.556		Crippen Method
mcvol	82.880	ml/mol	McGowan Method
pc	3615.89	kPa	Joback Method
tb	340.38	K	Joback Method
tc	513.77	K	Joback Method
tf	163.26	K	Joback Method
vc	0.314	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	133.95	J/mol×K	340.38	Joback Method
cpg	142.46	J/mol×K	369.28	Joback Method
cpg	150.67	J/mol×K	398.18	Joback Method
cpg	158.59	J/mol×K	427.07	Joback Method
cpg	166.23	J/mol×K	455.97	Joback Method
cpg	173.60	J/mol×K	484.87	Joback Method
cpg	180.69	J/mol×K	513.77	Joback Method
dvisc	0.0028355	Paxs	163.26	Joback Method

dvisc	0.0012426	Paxs	192.78	Joback Method
dvisc	0.0006780	Paxs	222.30	Joback Method
dvisc	0.0004264	Paxs	251.82	Joback Method
dvisc	0.0002955	Paxs	281.34	Joback Method
dvisc	0.0002196	Paxs	310.86	Joback Method
dvisc	0.0001718	Paxs	340.38	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C10034125&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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