

1-Propene, 1-(1-methylethoxy)-, (Z)-

Other names:	cis-1-Propenyl isopropyl ether
Inchi:	InChI=1S/C6H12O/c1-4-5-7-6(2)3/h4-6H,1-3H3/b5-4-
InchiKey:	PLGKZYGGZOMZHL-PLNGDYQASA-N
Formula:	C6H12O
SMILES:	CC=COC(C)C
Mol. weight [g/mol]:	100.16
CAS:	4188-64-1

Physical Properties

Property code	Value	Unit	Source
gf	-27.58	kJ/mol	Joback Method
hf	-187.45	kJ/mol	Joback Method
hfus	9.16	kJ/mol	Joback Method
hvap	30.93	kJ/mol	Joback Method
log10ws	-1.88		Crippen Method
logp	1.945		Crippen Method
mcvol	96.970	ml/mol	McGowan Method
pc	3261.58	kPa	Joback Method
tb	362.82	K	Joback Method
tc	540.32	K	Joback Method
tf	159.53	K	Joback Method
vc	0.363	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	167.57	J/mol×K	362.82	Joback Method
cpg	177.88	J/mol×K	392.40	Joback Method
cpg	187.81	J/mol×K	421.99	Joback Method
cpg	197.37	J/mol×K	451.57	Joback Method
cpg	206.56	J/mol×K	481.15	Joback Method
cpg	215.40	J/mol×K	510.74	Joback Method
cpg	223.90	J/mol×K	540.32	Joback Method
dvisc	0.0061309	Paxs	159.53	Joback Method

dvisc	0.0020189	Paxs	193.41	Joback Method
dvisc	0.0009258	Paxs	227.29	Joback Method
dvisc	0.0005198	Paxs	261.18	Joback Method
dvisc	0.0003332	Paxs	295.06	Joback Method
dvisc	0.0002340	Paxs	328.94	Joback Method
dvisc	0.0001756	Paxs	362.82	Joback Method

Sources

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=C4188641&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cp_g:	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
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	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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