Ether, 3,3-dimethyl-1-butenyl ethyl

Inchi: InChI=1S/C8H16O/c1-5-9-7-6-8(2,3)4/h6-7H,5H2,1-4H3/b7-6+
InchiKey: WSGATPNSJGOYHJ-VOTSOKGWSA-N
Formula: C8H16O
SMILES: CCOC=CC(C)(C)C
Mol. weight [g/mol]: 128.21
CAS: 16969-19-0

Physical Properties

Property code	Value	Unit	Source
gf	-5.46	kJ/mol	Joback Method
hf	-232.20	kJ/mol	Joback Method
hfus	10.45	kJ/mol	Joback Method
hvap	34.47	kJ/mol	Joback Method
log10ws	-2.37		Crippen Method
logp	2.583		Crippen Method
mcvol	125.150	ml/mol	McGowan Method
pc	2679.08	kPa	Joback Method
tb	405.79	K	Joback Method
tc	589.20	K	Joback Method
tf	199.49	K	Joback Method
vc	0.470	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	244.32	J/mol×K	405.79	Joback Method
cpg	307.71	J/mol×K	558.63	Joback Method
cpg	296.28	J/mol×K	528.06	Joback Method
cpg	284.25	J/mol×K	497.49	Joback Method
cpg	271.60	J/mol×K	466.93	Joback Method
cpg	258.30	J/mol×K	436.36	Joback Method
cpg	318.56	J/mol×K	589.20	Joback Method
dvisc	0.0001975	Pa×s	405.79	Joback Method
dvisc	0.0002720	Pa×s	371.41	Joback Method

dvisc	0.0003998	Pa×s	337.02	Joback Method
dvisc	0.0006415	Pa×s	302.64	Joback Method
dvisc	0.0011618	Pa×s	268.26	Joback Method
dvisc	0.0025060	Pa×s	233.87	Joback Method
dvisc	0.0070452	Pa×s	199.49	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=C16969190&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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