Ether, 6-methylheptyl vinyl

Other names:	Heptane, 1-(ethenyloxy)-6-methyl- Ether, isooctyl vinyl
Inchi:	InChI=1S/C10H20O/c1-4-11-9-7-5-6-8-10(2)3/h4,10H,1,5-9H2,2-3H3
InchiKey:	SHHYVKSJGBTTLX-UHFFFAOYSA-N
Formula:	C10H20O
SMILES:	C=COCCCCCC(C)C
Mol. weight [g/mol]:	156.27
CAS:	10573-35-0

Physical Properties

Property code	Value	Unit	Source
gf	13.72	kJ/mol	Joback Method
hf	-261.80	kJ/mol	Joback Method
hfus	18.04	kJ/mol	Joback Method
hvap	39.21	kJ/mol	Joback Method
log10ws	-3.20		Crippen Method
logp	3.363		Crippen Method
mcvol	153.330	ml/mol	McGowan Method
pc	2173.43	kPa	Joback Method
tb	448.90 ± 2.00	K	NIST Webbook
tc	616.05	K	Joback Method
tf	207.93	K	Joback Method
vc	0.589	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	325.63	J/mol×K	446.86	Joback Method
cpg	340.29	J/mol×K	475.06	Joback Method
cpg	354.41	J/mol×K	503.26	Joback Method
cpg	368.01	J/mol×K	531.46	Joback Method
cpg	381.10	J/mol×K	559.65	Joback Method
cpg	393.67	J/mol×K	587.85	Joback Method
cpg	405.76	J/mol×K	616.05	Joback Method

dvisc	0.0061809	Pa×s	207.93	Joback Method
dvisc	0.0021823	Pa×s	247.75	Joback Method
dvisc	0.0010280	Pa×s	287.57	Joback Method
dvisc	0.0005816	Pa×s	327.39	Joback Method
dvisc	0.0003723	Pa×s	367.22	Joback Method
dvisc	0.0002600	Pa×s	407.04	Joback Method
dvisc	0.0001936	Pa×s	446.86	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=C10573350&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