Pentane, 1-(2-propenyloxy)-

Other names:	Ether, allyl pentyl
	Allyl pentyl ether
	Pentyl allyl ether
Inchi:	InChI=1S/C8H16O/c1-3-5-6-8-9-7-4-2/h4H,2-3,5-8H2,1H3
InchiKey:	QHOPNDWHOHMZPV-UHFFFAOYSA-N
Formula:	C8H16O
SMILES:	C=CCOCCCCC
Mol. weight [g/mol]:	128.21
CAS:	23186-70-1

Physical Properties

Property code	Value	Unit	Source
gf	-0.68	kJ/mol	Joback Method
hf	-215.24	kJ/mol	Joback Method
hfus	16.38	kJ/mol	Joback Method
hvap	35.14	kJ/mol	Joback Method
log10ws	-2.11		Crippen Method
logp	2.379		Crippen Method
mcvol	125.150	ml/mol	McGowan Method
pc	2600.43	kPa	Joback Method
tb	401.54	K	Joback Method
tc	568.77	K	Joback Method
tf	200.39	K	Joback Method
vc	0.482	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.31	J/mol×K	401.54	Joback Method
cpg	254.47	J/mol×K	429.41	Joback Method
cpg	266.21	J/mol×K	457.28	Joback Method
cpg	277.56	J/mol×K	485.15	Joback Method
cpg	288.50	J/mol×K	513.02	Joback Method
cpg	299.06	J/mol×K	540.90	Joback Method

cpg	309.23	J/mol×K	568.77	Joback Method
dvisc	0.0035637	Pa×s	200.39	Joback Method
dvisc	0.0015989	Pa×s	233.91	Joback Method
dvisc	0.0008770	Pa×s	267.44	Joback Method
dvisc	0.0005499	Pa×s	300.96	Joback Method
dvisc	0.0003786	Pa×s	334.49	Joback Method
dvisc	0.0002790	Pa×s	368.01	Joback Method
dvisc	0.0002164	Pa×s	401.54	Joback Method

Sources

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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C23186701&Units=SI

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