1-Pentene, 2-methoxy-4,4-dimethyl-

Other names: 4,4-Dimethyl-2-methoxy-1-pentene
Inchi: InChI=1S/C8H16O/c1-7(9-5)6-8(2,3)4/h1,6H2,2-5H3
InchiKey: LSHQWPNTYWCQMU-UHFFFAOYSA-N
Formula: C8H16O
SMILES: C=C(CC(C)(C)C)OC
Mol. weight [g/mol]: 128.21
CAS: 66017-25-2

Physical Properties

Property code	Value	Unit	Source
gf	-6.39	kJ/mol	Joback Method
hf	-233.78	kJ/mol	Joback Method
hfus	7.66	kJ/mol	Joback Method
hvap	33.93	kJ/mol	Joback Method
log10ws	-2.37		Crippen Method
logp	2.583		Crippen Method
mcvol	125.150	ml/mol	McGowan Method
pc	2665.27	kPa	Joback Method
tb	398.19	K	Joback Method
tc	579.86	K	Joback Method
tf	188.85	K	Joback Method
vc	0.472	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	243.78	J/mol×K	398.19	Joback Method
cpg	257.62	J/mol×K	428.47	Joback Method
cpg	270.82	J/mol×K	458.75	Joback Method
cpg	283.42	J/mol×K	489.02	Joback Method
cpg	295.43	J/mol×K	519.30	Joback Method
cpg	306.87	J/mol×K	549.58	Joback Method
cpg	317.76	J/mol×K	579.86	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C66017252&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

cpg:	Ideal gas heat capacity
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