2-Pentene, 4-methyl-2-[(1-methylethenyl)oxy]-, (Z)-

Inchi: InChI=1S/C9H16O/c1-7(2)6-9(5)10-8(3)4/h6-7H,3H2,1-2,4-5H3/b9-6-
InchiKey: RGZIZBNBDNLLIX-TWGQIWQCSA-N
Formula: C9H16O
SMILES: C=C(C)OC(C)=CC(C)C
Mol. weight [g/mol]: 140.22
CAS: 61463-41-0

Physical Properties

Property code	Value	Unit	Source
gf	68.42	kJ/mol	Joback Method
hf	-143.52	kJ/mol	Joback Method
hfus	13.03	kJ/mol	Joback Method
hvap	37.10	kJ/mol	Joback Method
log10ws	-3.13		Crippen Method
logp	3.096		Crippen Method
mcvol	134.940	ml/mol	McGowan Method
pc	2532.82	kPa	Joback Method
tb	427.90	K	Joback Method
tc	613.41	K	Joback Method
tf	163.66	K	Joback Method
vc	0.514	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	267.49	J/mol×K	427.90	Joback Method
cpg	281.39	J/mol×K	458.82	Joback Method
cpg	294.68	J/mol×K	489.74	Joback Method
cpg	307.38	J/mol×K	520.66	Joback Method
cpg	319.50	J/mol×K	551.57	Joback Method
cpg	331.08	J/mol×K	582.49	Joback Method
cpg	342.12	J/mol×K	613.41	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C61463410&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

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