2-Butene, 2-(2-methoxyethyl)-3-methyl

Inchi: InChI=1S/C8H16O2/c1-7(2)8(3)10-6-5-9-4/h5-6H2,1-4H3
InchiKey: ZBWBYVIFNVMULT-UHFFFAOYSA-N
Formula: C8H16O2
SMILES: COCCOC(C)=C(C)C
Mol. weight [g/mol]: 144.21
CAS: 39922-44-6

Physical Properties

Property code	Value	Unit	Source
gf	-130.40	kJ/mol	Joback Method
hf	-375.25	kJ/mol	Joback Method
hfus	16.43	kJ/mol	Joback Method
hvap	38.34	kJ/mol	Joback Method
log10ws	-1.69		Crippen Method
logp	1.963		Crippen Method
mcvol	131.020	ml/mol	McGowan Method
pc	2608.40	kPa	Joback Method
tb	431.20	K	Joback Method
tc	609.86	K	Joback Method
tf	191.38	K	Joback Method
vc	0.501	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	266.86	J/mol×K	431.20	Joback Method
cpg	279.50	J/mol×K	460.98	Joback Method
cpg	291.71	J/mol×K	490.75	Joback Method
cpg	303.50	J/mol×K	520.53	Joback Method
cpg	314.86	J/mol×K	550.31	Joback Method
cpg	325.81	J/mol×K	580.08	Joback Method
cpg	336.34	J/mol×K	609.86	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C39922446&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