2-(2-Methoxyethoxy)-3-methyl-1-butene

Inchi: InChI=1S/C8H16O2/c1-7(2)8(3)10-6-5-9-4/h7H,3,5-6H2,1-2,4H3
InchiKey: KXZLVOUJNRRRFT-UHFFFAOYSA-N
Formula: C8H16O2
SMILES: C=C(OCCOC)C(C)C
Mol. weight [g/mol]: 144.21
CAS: 56798-13-1

Physical Properties

Property code	Value	Unit	Source
gf	-116.67	kJ/mol	Joback Method
hf	-362.53	kJ/mol	Joback Method
hfus	12.74	kJ/mol	Joback Method
hvap	37.24	kJ/mol	Joback Method
log10ws	-1.45		Crippen Method
logp	1.819		Crippen Method
mcvol	131.020	ml/mol	McGowan Method
pc	2589.85	kPa	Joback Method
tb	423.40	K	Joback Method
tc	597.77	K	Joback Method
tf	193.66	K	Joback Method
vc	0.495	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	266.57	J/mol×K	423.40	Joback Method
cpg	279.03	J/mol×K	452.46	Joback Method
cpg	291.10	J/mol×K	481.52	Joback Method
cpg	302.78	J/mol×K	510.58	Joback Method
cpg	314.08	J/mol×K	539.65	Joback Method
cpg	324.99	J/mol×K	568.71	Joback Method
cpg	335.52	J/mol×K	597.77	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=C56798131&Units=SI

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