2-methyl-2-butenyl 2-methylbutanoate

Inchi: InChI=1S/C10H18O2/c1-5-8(3)7-12-10(11)9(4)6-2/h5,9H,6-7H2,1-4H3/b8-5+
InchiKey: NLADHFLYQUEJGQ-VMPITWQZSA-N
Formula: C10H18O2
SMILES: CC=C(C)COC(=O)C(C)CC
Mol. weight [g/mol]: 170.25

Physical Properties

Property code	Value	Unit	Source
gf	-131.37	kJ/mol	Joback Method
hf	-392.38	kJ/mol	Joback Method
hfus	19.81	kJ/mol	Joback Method
hvap	46.66	kJ/mol	Joback Method
log10ws	-2.48		Crippen Method
logp	2.542		Crippen Method
mcvol	154.900	ml/mol	McGowan Method
pc	2340.56	kPa	Joback Method
ripol	1400.00		NIST Webbook
tb	508.09	K	Joback Method
tc	694.82	K	Joback Method
tf	240.58	K	Joback Method
vc	0.595	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	350.82	J/mol×K	508.09	Joback Method
cpg	365.21	J/mol×K	539.21	Joback Method
cpg	378.95	J/mol×K	570.33	Joback Method
cpg	392.08	J/mol×K	601.46	Joback Method
cpg	404.60	J/mol×K	632.58	Joback Method
cpg	416.53	J/mol×K	663.70	Joback Method
cpg	427.88	J/mol×K	694.82	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R322420&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume