

3-methyl-2-butenyl 2-methylcrotonate

Other names:	(E)-3-Methylbut-2-en-1-yl 2-methylbut-2-enoate
Inchi:	InChI=1S/C10H16O2/c1-5-9(4)10(11)12-7-6-8(2)3/h5-6H,7H2,1-4H3/b9-5+
InchiKey:	WTDWXMWAIMIKSI-WEVVVXLNSA-N
Formula:	C10H16O2
SMILES:	CC=C(C)C(=O)OCC=C(C)C
Mol. weight [g/mol]:	168.23
CAS:	83783-86-2

Physical Properties

Property code	Value	Unit	Source
gf	-57.26	kJ/mol	Joback Method
hf	-279.67	kJ/mol	Joback Method
hfus	22.23	kJ/mol	Joback Method
hvap	47.09	kJ/mol	Joback Method
log10ws	-2.58		Crippen Method
logp	2.462		Crippen Method
mcvol	150.600	ml/mol	McGowan Method
pc	2455.60	kPa	Joback Method
rinpol	1246.80		NIST Webbook
rinpol	1246.80		NIST Webbook
tb	512.57	K	Joback Method
tc	707.11	K	Joback Method
tf	236.54	K	Joback Method
vc	0.582	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	332.83	J/mol×K	512.57	Joback Method
cpg	346.67	J/mol×K	544.99	Joback Method
cpg	359.82	J/mol×K	577.42	Joback Method
cpg	372.30	J/mol×K	609.84	Joback Method
cpg	384.14	J/mol×K	642.27	Joback Method
cpg	395.38	J/mol×K	674.69	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
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=C83783862&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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