

2-Butenoic acid, 2-chloro-3-methoxy-, methyl ester, (Z)-

Inchi:	InChI=1S/C6H9ClO3/c1-4(9-2)5(7)6(8)10-3/h1-3H3/b5-4-
InchiKey:	UCQQBIORXJIZBS-PLNGDYQASA-N
Formula:	C6H9ClO3
SMILES:	COC(=O)C(Cl)=C(C)OC
Mol. weight [g/mol]:	164.59
CAS:	82481-23-0

Physical Properties

Property code	Value	Unit	Source
gf	-288.09	kJ/mol	Joback Method
hf	-462.29	kJ/mol	Joback Method
hfus	17.05	kJ/mol	Joback Method
hvap	45.02	kJ/mol	Joback Method
log10ws	-1.28		Crippen Method
logp	1.276		Crippen Method
mcvol	116.650	ml/mol	McGowan Method
pc	3302.95	kPa	Joback Method
tb	476.74	K	Joback Method
tc	676.44	K	Joback Method
tf	248.69	K	Joback Method
vc	0.445	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	229.15	J/molxK	476.74	Joback Method
cpg	238.42	J/molxK	510.02	Joback Method
cpg	247.33	J/molxK	543.31	Joback Method
cpg	255.86	J/molxK	576.59	Joback Method
cpg	264.02	J/molxK	609.87	Joback Method
cpg	271.81	J/molxK	643.15	Joback Method
cpg	279.23	J/molxK	676.44	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C82481230&Units=SI
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

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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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