2-Propenoic acid, 2-methyl-, ethenyl ester

Other names:	Methacrylic acid, vinyl ester
	Vinyl methacrylate
	2-Methyl-2-propenoic acid, ethenyl ester
	1-ethenyl-2-methyl-2-propenoate
Inchi:	InChI=1S/C6H8O2/c1-4-8-6(7)5(2)3/h4H,1-2H2,3H3
InchiKey:	FFYWKOUKJFCBAM-UHFFFAOYSA-N
Formula:	C6H8O2
SMILES:	C=COC(=O)C(=C)C
Mol. weight [g/mol]:	112.13
CAS:	4245-37-8

Physical Properties

Property code	Value	Unit	Source
gf	-67.15	kJ/mol	Joback Method
hf	-170.90	kJ/mol	Joback Method
hfus	10.21	kJ/mol	Joback Method
hvap	36.85	kJ/mol	Joback Method
log10ws	-1.40		Crippen Method
logp	1.249		Crippen Method
mcvol	94.240	ml/mol	McGowan Method
pc	3633.35	kPa	Joback Method
ripol	1540.00		NIST Webbook
ripol	1540.00		NIST Webbook
tb	406.21	K	Joback Method
tc	595.13	K	Joback Method
tf	212.06	K	Joback Method
vc	0.358	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	170.12	J/mol×K	406.21	Joback Method
cpg	178.73	J/mol×K	437.70	Joback Method
cpg	187.00	J/mol×K	469.18	Joback Method

cpg	194.91	J/mol×K	500.67	Joback Method
cpg	202.49	J/mol×K	532.16	Joback Method
cpg	209.74	J/mol×K	563.64	Joback Method
cpg	216.65	J/mol×K	595.13	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=C4245378&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume