Formic acid, ethenyl ester

Other names:	Ethenyl formate
	Formic acid, vinyl ester
	Vinyl formate
	Vinyl methanoate
	Vinylester kyseliny mravenci
Inchi:	InChI=1S/C3H4O2/c1-2-5-3-4/h2-3H,1H2
InchiKey:	GFJVXXWOPWLRNU-UHFFFAOYSA-N
Formula:	C3H4O2
SMILES:	C=COC=O
Mol. weight [g/mol]:	72.06
CAS:	692-45-5

Physical Properties

Property code	Value	Unit	Source
af	0.5500		KDB
gf	-142.30	kJ/mol	Joback Method
hf	-197.62	kJ/mol	Joback Method
hfus	5.72	kJ/mol	Joback Method
hvap	30.73	kJ/mol	Joback Method
log10ws	-0.29		Crippen Method
logp	0.303		Crippen Method
mcvol	56.270	ml/mol	McGowan Method
pc	5770.00	kPa	KDB
ripol	1090.00		NIST Webbook
tb	319.60	K	KDB
tc	475.00	K	KDB
tf	215.50	K	KDB
vc	0.210	m3/kmol	KDB
zc	0.3068070		KDB

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	112.84	J/mol×K	513.52	Joback Method

cpg	88.98	J/mol×K	335.80	Joback Method
cpg	93.23	J/mol×K	365.42	Joback Method
cpg	97.38	J/mol×K	395.04	Joback Method
cpg	101.41	J/mol×K	424.66	Joback Method
cpg	105.34	J/mol×K	454.28	Joback Method
cpg	109.15	J/mol×K	483.90	Joback Method
dvisc	0.0002496	Pa×s	335.80	Joback Method
dvisc	0.0018810	Pa×s	186.04	Joback Method
dvisc	0.0011009	Pa×s	211.00	Joback Method
dvisc	0.0007216	Pa×s	235.96	Joback Method
dvisc	0.0005128	Pa×s	260.92	Joback Method
dvisc	0.0003868	Pa×s	285.88	Joback Method
dvisc	0.0003053	Pa×s	310.84	Joback Method
rhol	963.00	kg/m3	293.00	KDB

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
KDB:	https://www.cheric.org/files/research/kdb/mol/mol1164.mol
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C692455&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
KDB Vapor Pressure Data:	https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=1164

Legend

af:	Acentric Factor
cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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
rhol:	Liquid Density
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume
zc:	Critical Compressibility