Isobutyric acid, vinyl ester

Other names: Propanoic acid, 2-methyl-, ethenyl ester
vinyl isobutyrate
Inchi: InChI=1S/C6H10O2/c1-4-8-6(7)5(2)3/h4-5H,1H2,2-3H3
InchiKey: WNMORWGTPVWAIB-UHFFFAOYSA-N
Formula: C6H10O2
SMILES: C=COC(=O)C(C)C
Mol. weight [g/mol]: 114.14
CAS: 2424-98-8

Physical Properties

Property code	Value	Unit	Source
gf	-148.88	kJ/mol	Joback Method
hf	-291.82	kJ/mol	Joback Method
hfus	9.28	kJ/mol	Joback Method
hvap	37.05	kJ/mol	Joback Method
log10ws	-1.30		Crippen Method
logp	1.329		Crippen Method
mcvol	98.540	ml/mol	McGowan Method
pc	3468.36	kPa	Joback Method
tb	409.21	K	Joback Method
tc	594.78	K	Joback Method
tf	178.20 ± 0.60	K	NIST Webbook
vc	0.370	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	184.94	J/mol×K	409.21	Joback Method
cpg	194.42	J/mol×K	440.14	Joback Method
cpg	203.56	J/mol×K	471.07	Joback Method
cpg	212.35	J/mol×K	502.00	Joback Method
cpg	220.81	J/mol×K	532.93	Joback Method
cpg	228.92	J/mol×K	563.86	Joback Method
cpg	236.69	J/mol×K	594.78	Joback Method

dvisc	0.0040214	Pa×s	212.78	Joback Method
dvisc	0.0018765	Pa×s	245.52	Joback Method
dvisc	0.0010476	Pa×s	278.26	Joback Method
dvisc	0.0006612	Pa×s	311.00	Joback Method
dvisc	0.0004556	Pa×s	343.73	Joback Method
dvisc	0.0003349	Pa×s	376.47	Joback Method
dvisc	0.0002586	Pa×s	409.21	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2424988&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

Legend

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume