Propanoic acid, 2-hydroxyethyl ester

Other names:	2-Hydroxyethyl propionate
	2-Hydroxyethyl propanoate
	Ethylene glycol, monopropionate
Inchi:	InChI=1S/C5H10O3/c1-2-5(7)8-4-3-6/h6H,2-4H2,1H3
InchiKey:	SFAMKDPMPDEXGH-UHFFFAOYSA-N
Formula:	C5H10O3
SMILES:	CCC(=O)OCCO
Mol. weight [g/mol]:	118.13
CAS:	24567-27-9

Physical Properties

Property code	Value	Unit	Source
gf	-379.52	kJ/mol	Joback Method
hf	-543.56	kJ/mol	Joback Method
hfus	15.58	kJ/mol	Joback Method
hvap	52.56	kJ/mol	Joback Method
log10ws	-0.04		Crippen Method
logp	-0.068		Crippen Method
mcvol	94.620	ml/mol	McGowan Method
pc	4109.14	kPa	Joback Method
rinpol	793.00		NIST Webbook
tb	482.27	K	Joback Method
tc	654.52	K	Joback Method
tf	279.09	K	Joback Method
vc	0.358	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	204.55	J/mol×K	482.27	Joback Method
cpg	212.29	J/mol×K	510.98	Joback Method
cpg	219.76	J/mol×K	539.69	Joback Method
cpg	226.98	J/mol×K	568.39	Joback Method
cpg	233.93	J/mol×K	597.10	Joback Method

cpg	240.63	J/mol×K	625.81	Joback Method
cpg	247.05	J/mol×K	654.52	Joback Method
dvisc	0.0141369	Pa×s	279.09	Joback Method
dvisc	0.0046479	Pa×s	312.95	Joback Method
dvisc	0.0018989	Pa×s	346.82	Joback Method
dvisc	0.0009097	Pa×s	380.68	Joback Method
dvisc	0.0004915	Pa×s	414.54	Joback Method
dvisc	0.0002914	Pa×s	448.41	Joback Method
dvisc	0.0001860	Pa×s	482.27	Joback Method

Sources

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=C24567279&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume