2-Ethoxyethyl acrylate

Other names:	2-Propenoic acid, 2-ethoxyethyl ester
	Acrylic acid, 2-ethoxyethanol ester
	Acrylic acid, 2-ethoxyethyl ester
	Cellosolve acrylate
	Ethanol, 2-ethoxy-, acrylate
	Ethoxyethyl acrylate
	Ethylene glycol monoethyl ether acrylate
	Ethylene glycol monoethyl ether propenoate
	2-Ethoxyethyl 2-propenoate
	2-Ethoxyethylester kyseliny akrylove
Inchi:	InChI=1S/C7H12O3/c1-3-7(8)10-6-5-9-4-2/h3H,1,4-6H2,2H3
InchiKey:	FWWXYLGCHHIKNY-UHFFFAOYSA-N
Formula:	C7H12O3
SMILES:	C=CC(=O)OCCOCC
Mol. weight [g/mol]:	144.17
CAS:	106-74-1

Physical Properties

Property code	Value	Unit	Source
gf	-243.02	kJ/mol	Joback Method
hf	-439.40	kJ/mol	Joback Method
hfus	16.58	kJ/mol	Joback Method
hvap	42.07	kJ/mol	Joback Method
log10ws	-0.56		Crippen Method
logp	0.752		Crippen Method
mcvol	118.500	ml/mol	McGowan Method
pc	3022.28	kPa	Joback Method
tb	447.25	K	NIST Webbook
tc	634.51	K	Joback Method
tf	225.90 ± 0.60	K	NIST Webbook
tf	225.85	K	NIST Webbook
vc	0.451	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	245.27	J/mol×K	454.95	Joback Method
cpg	255.58	J/mol×K	484.88	Joback Method
cpg	265.55	J/mol×K	514.80	Joback Method
cpg	275.20	J/mol×K	544.73	Joback Method
cpg	284.52	J/mol×K	574.65	Joback Method
cpg	293.49	J/mol×K	604.58	Joback Method
cpg	302.12	J/mol×K	634.51	Joback Method
dvisc	0.0022166	Pa×s	261.28	Joback Method
dvisc	0.0012324	Pa×s	293.56	Joback Method
dvisc	0.0007698	Pa×s	325.84	Joback Method
dvisc	0.0005234	Pa×s	358.12	Joback Method
dvisc	0.0003793	Pa×s	390.39	Joback Method
dvisc	0.0002887	Pa×s	422.67	Joback Method
dvisc	0.0002284	Pa×s	454.95	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=C106741&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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