

# 1-Propanamine, 3-ethoxy-

<b>Other names:</b>	3-Ethoxy-1-propylamine 3-Ethoxypropylamine 3-ethoxy-1-propanamine 3-ethoxypropan-1-amine Propylamine, 3-ethoxy-
<b>Inchi:</b>	InChI=1S/C5H13NO/c1-2-7-5-3-4-6/h2-6H2,1H3
<b>InchiKey:</b>	SOYBEXQHNURCGE-UHFFFAOYSA-N
<b>Formula:</b>	C5H13NO
<b>SMILES:</b>	CCOCCCN
<b>Mol. weight [g/mol]:</b>	103.16
<b>CAS:</b>	6291-85-6

## Physical Properties

Property code	Value	Unit	Source
gf	-47.33	kJ/mol	Joback Method
hf	-244.96	kJ/mol	Joback Method
hfus	15.09	kJ/mol	Joback Method
hvap	39.78	kJ/mol	Joback Method
log10ws	-0.44		Crippen Method
logp	0.372		Crippen Method
mcvol	97.160	ml/mol	McGowan Method
pc	3637.73	kPa	Joback Method
tb	410.20	K	NIST Webbook
tc	589.73	K	Joback Method
tf	251.60	K	Joback Method
vc	0.362	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	250.06	J/molxK	589.73	Joback Method
cpg	205.51	J/molxK	438.91	Joback Method
cpg	215.05	J/molxK	469.08	Joback Method
cpg	224.28	J/molxK	499.24	Joback Method

cpg	233.19	J/mol×K	529.40	Joback Method
cpg	241.78	J/mol×K	559.57	Joback Method
cpg	195.65	J/mol×K	408.75	Joback Method
rhoI	846.08	kg/m <sup>3</sup>	303.15	Volumetric Study of (3-Ethoxypropan-1-amine + Water) Mixtures between (283.15 and 303.15) K
rhoI	865.36	kg/m <sup>3</sup>	283.15	Volumetric Study of (3-Ethoxypropan-1-amine + Water) Mixtures between (283.15 and 303.15) K
rhoI	855.72	kg/m <sup>3</sup>	293.15	Volumetric Study of (3-Ethoxypropan-1-amine + Water) Mixtures between (283.15 and 303.15) K
rhoI	851.02	kg/m <sup>3</sup>	298.15	Volumetric Study of (3-Ethoxypropan-1-amine + Water) Mixtures between (283.15 and 303.15) K
rhoI	860.63	kg/m <sup>3</sup>	288.15	Volumetric Study of (3-Ethoxypropan-1-amine + Water) Mixtures between (283.15 and 303.15) K
speedsl	1386.42	m/s	283.15	Ultrasound speeds and molar isentropic compressions of (3-ethoxypropane-1-amine + water) mixtures from T = (283.15 to 303.15) K
speedsl	1364.24	m/s	288.15	Ultrasound speeds and molar isentropic compressions of (3-ethoxypropane-1-amine + water) mixtures from T = (283.15 to 303.15) K
speedsl	1342.05	m/s	293.15	Ultrasound speeds and molar isentropic compressions of (3-ethoxypropane-1-amine + water) mixtures from T = (283.15 to 303.15) K

speedsl	1321.25	m/s	298.15	Ultrasound speeds and molar isentropic compressions of (3-ethoxypropane-1-amine + water) mixtures from T = (283.15 to 303.15) K
speedsl	1300.44	m/s	303.15	Ultrasound speeds and molar isentropic compressions of (3-ethoxypropane-1-amine + water) mixtures from T = (283.15 to 303.15) K

## Sources

<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C6291856&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C6291856&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Ultrasound speeds and molar isentropic compressions of Excess Partial Molar Enthalpies of 3-Ethoxypropan-1-amine in Water at 283.15 and 303.15 K: A Density Study</b>	<a href="https://www.doi.org/10.1016/j.jct.2013.05.003">https://www.doi.org/10.1016/j.jct.2013.05.003</a>
<b>3-Ethoxypropan-1-amine in Water at 283.15 K</b>	<a href="https://www.doi.org/10.1021/acs.jced.7b00900">https://www.doi.org/10.1021/acs.jced.7b00900</a>
<b>3-Ethoxypropan-1-amine + Water) Mixtures between (283.15 and 303.15) K:</b>	<a href="https://www.doi.org/10.1021/je3003578">https://www.doi.org/10.1021/je3003578</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rho:</b>	Liquid Density
<b>speedsl:</b>	Speed of sound in fluid
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature

**tf:** Normal melting (fusion) point

**vc:** Critical Volume

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