Ethanamine, 2-methoxy-

Other names:	1-Amino-2-methoxyethane
	1-Methoxy-2-aminoethane
	2-Aminoethyl methyl ether
	2-Methoxy-1-ethanamine
	2-Methoxyethanamine
	2-methoxyethylamine
	CH3OCH2CH2NH2
	Ethylamine, 2-methoxy-
	Methoxyethylamine
	«beta»-Methoxyethylamine
Inchi:	InChI=1S/C3H9NO/c1-5-3-2-4/h2-4H2,1H3
InchiKey:	ASUDFOJKTJLAIK-UHFFFAOYSA-N
Formula:	C3H9NO
SMILES:	COCCN
Mol. weight [g/mol]:	75.11
CAS:	109-85-3

Physical Properties

Property code	Value	Unit	Source
affp	928.60	kJ/mol	NIST Webbook
basg	894.60	kJ/mol	NIST Webbook
gf	-64.17	kJ/mol	Joback Method
hf	-203.68	kJ/mol	Joback Method
hfus	9.91	kJ/mol	Joback Method
hvap	35.32	kJ/mol	Joback Method
ie	9.45 ± 0.09	eV	NIST Webbook
ie	9.40	eV	NIST Webbook
ie	8.90	eV	NIST Webbook
log10ws	0.40		Crippen Method
logp	-0.408		Crippen Method
mcvol	68.980	ml/mol	McGowan Method
pc	4652.99	kPa	Joback Method
tb	368.20	K	NIST Webbook
tc	545.77	K	Joback Method
tf	229.06	K	Joback Method
vc	0.251	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	126.14	J/mol×K	362.99	Joback Method
cpg	132.99	J/mol×K	393.45	Joback Method
cpg	139.66	J/mol×K	423.92	Joback Method
cpg	146.16	J/mol×K	454.38	Joback Method
cpg	152.48	J/mol×K	484.84	Joback Method
cpg	158.61	J/mol×K	515.31	Joback Method
cpg	164.55	J/mol×K	545.77	Joback Method
hvapt	38.80	kJ/mol	298.00	NIST Webbook
pvap	2.51	kPa	280.47	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	1.81	kPa	275.16	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	3.55	kPa	286.36	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols

pvap	4.48	kPa	290.46	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols	
pvap	5.68	kPa	294.84	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols	
pvap	6.75	kPa	298.14	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols	
pvap	6.94	kPa	298.64	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols	
pvap	8.66	kPa	302.99	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols	

pvap	11.06	kPa	307.98	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	13.77	kPa	312.65	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols
pvap	17.25	kPa	317.60	Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	368.20	K	101.00	NIST Webbook

Sources

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=C109853&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Vapor Pressure and Its Temperature Dependence of 28 Organic Compounds: Cyclic Amines, Cyclic Ethers, and Cyclic and Open Chain Secondary Alcohols:

https://www.doi.org/10.1021/acs.jced.6b00576

Legend

affp:	Proton affinity
basg:	Gas basicity
cpg:	Ideal gas heat capacity
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
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume