

CARBAMIC ACID, ETHYL-, ETHYL ESTER

Other names:	Ethyl N-ethylcarbamate Ethyl ethylcarbamate Ethylcarbamic acid, ethyl ester N-Ethylurethane
Inchi:	InChI=1S/C5H11NO2/c1-3-6-5(7)8-4-2/h3-4H2,1-2H3,(H,6,7)
InchiKey:	GZXSDYYWLZERLF-UHFFFAOYSA-N
Formula:	C5H11NO2
SMILES:	CCNC(=O)OCC
Mol. weight [g/mol]:	117.15

Physical Properties

Property code	Value	Unit	Source
af	0.4919		Cheméo Relay (1.0)
gf	-153.31	kJ/mol	Joback Method
hf	-480.80	kJ/mol	Cheméo Relay (1.0)
hfus	16.59	kJ/mol	Joback Method
hvap	54.56	kJ/mol	Cheméo Relay (1.0)
ie	9.25	eV	Cheméo Relay (1.0)
log10ws	-0.41		Cheméo Relay (1.0)
logp	0.752		Crippen Method
mcvol	98.730	ml/mol	McGowan Method
pc	3722.56	kPa	Joback Method
tb	458.40 ± 0.30	K	NIST Webbook
tc	610.87	K	Cheméo Relay (1.0)
tf	243.18	K	Cheméo Relay (1.0)
vc	0.375	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	201.38	J/mol×K	440.26	Joback Method
cpg	210.79	J/mol×K	470.75	Joback Method
cpg	219.87	J/mol×K	501.24	Joback Method
cpg	228.63	J/mol×K	531.73	Joback Method

cpg	237.06	J/mol×K	562.22	Joback Method
cpg	245.16	J/mol×K	592.71	Joback Method
cpg	252.94	J/mol×K	623.20	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	358.20	K	2.70	NIST Webbook

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C623789&Units=SI
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	

Legend

af:	Acentric Factor
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
ie:	Ionization energy
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature

tf: Normal melting (fusion) point
vc: Critical Volume

Latest version available from:

<https://www.cheméo.com/cid/41-137-4/CARBAMIC-ACID-ETHYL-ETHYL-ESTER.pdf>

Generated by Cheméo on 2026-07-21 18:10:42.900593398 +0000 UTC m=+168538.742478793.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.