

Ethyl N,N-diethyloxamate

Other names:	Ethyl diethyl oxamate
Inchi:	InChI=1S/C8H15NO3/c1-4-9(5-2)7(10)8(11)12-6-3/h4-6H2,1-3H3
InchiKey:	VABKVSWGYZESTA-UHFFFAOYSA-N
Formula:	C8H15NO3
SMILES:	CCOC(=O)C(=O)N(CC)CC
Mol. weight [g/mol]:	173.21
CAS:	5411-58-5

Physical Properties

Property code	Value	Unit	Source
gf	-235.58	kJ/mol	Joback Method
hf	-498.30	kJ/mol	Joback Method
hfus	23.88	kJ/mol	Joback Method
hvap	51.35	kJ/mol	Joback Method
log10ws	-0.38		Crippen Method
logp	0.418		Crippen Method
mcvol	142.570	ml/mol	McGowan Method
pc	2832.35	kPa	Joback Method
tb	525.04	K	Joback Method
tc	707.75	K	Joback Method
tf	334.48	K	Joback Method
vc	0.531	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	388.46	J/mol×K	677.30	Joback Method
cpg	332.15	J/mol×K	525.04	Joback Method
cpg	344.49	J/mol×K	555.49	Joback Method
cpg	356.28	J/mol×K	585.94	Joback Method
cpg	367.54	J/mol×K	616.40	Joback Method
cpg	378.26	J/mol×K	646.85	Joback Method
cpg	398.15	J/mol×K	707.75	Joback Method
hvapt	60.50	kJ/mol	437.00	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	418.50 ± 0.50	K	3.50	NIST Webbook

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=C5411585&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

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
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.chemeo.com/cid/36-288-3/Ethyl-N-N-diethyloxamate.pdf>

Generated by Cheméo on 2024-04-26 14:24:34.405319512 +0000 UTC m=+16430723.325896833.

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