

Ethanediamide, tetraethyl-

Other names:	Tetraethyloxamide
Inchi:	InChI=1S/C10H20N2O2/c1-5-11(6-2)9(13)10(14)12(7-3)8-4/h5-8H2,1-4H3
InchiKey:	CGYBEFMHOFJBIX-UHFFFAOYSA-N
Formula:	C10H20N2O2
SMILES:	CCN(CC)C(=O)C(=O)N(CC)CC
Mol. weight [g/mol]:	200.28
CAS:	14288-05-2

Physical Properties

Property code	Value	Unit	Source
gf	-2.96	kJ/mol	Joback Method
hf	-339.83	kJ/mol	Joback Method
hfus	30.90	kJ/mol	Joback Method
hvap	55.43	kJ/mol	Joback Method
log10ws	-0.70		Crippen Method
logp	0.723		Crippen Method
mcvol	174.860	ml/mol	McGowan Method
pc	2365.67	kPa	Joback Method
tb	560.82	K	Joback Method
tc	739.02	K	Joback Method
tf	367.26	K	Joback Method
vc	0.643	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	490.39	J/mol×K	679.62	Joback Method
cpg	502.28	J/mol×K	709.32	Joback Method
cpg	435.99	J/mol×K	560.82	Joback Method
cpg	450.67	J/mol×K	590.52	Joback Method
cpg	464.61	J/mol×K	620.22	Joback Method
cpg	477.84	J/mol×K	649.92	Joback Method
cpg	513.54	J/mol×K	739.02	Joback Method
hfust	17.00	kJ/mol	310.20	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=C14288052&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
hfust:	Enthalpy of fusion at a given temperature
hvac:	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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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