1,8-Diamino-3,6-dioxaoctane

Other names:	Ethanamine, 2,2'-[1,2-ethanediylbis(oxy)]bis- 3,6-Dioxaoctane-1,8-diamine 3,6-dioxaoctamethylenediamine 1,2-bis(2-aminoethoxy)ethane
Inchi:	InChI=1S/C6H16N2O2/c7-1-3-9-5-6-10-4-2-8/h1-8H2
InchiKey:	IWBOPFCKHIJFMS-UHFFFAOYSA-N
Formula:	C6H16N2O2
SMILES:	NCCOCCOCCN
Mol. weight [g/mol]:	148.20
CAS:	929-59-9

Physical Properties

Property code	Value	Unit	Source
gf	-77.46	kJ/mol	Joback Method
hf	-364.03	kJ/mol	Joback Method
hfus	24.07	kJ/mol	Joback Method
hvap	58.80	kJ/mol	NIST Webbook
log10ws	0.62		Crippen Method
logp	-1.063		Crippen Method
mcvol	127.100	ml/mol	McGowan Method
pc	3403.91	kPa	Joback Method
tb	526.58	K	Joback Method
tc	716.93	K	Joback Method
tf	368.36	K	Joback Method
vc	0.466	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	311.78	J/mol×K	526.58	Joback Method
cpg	323.37	J/mol×K	558.30	Joback Method
cpg	334.53	J/mol×K	590.03	Joback Method
cpg	345.26	J/mol×K	621.75	Joback Method
cpg	355.55	J/mol×K	653.48	Joback Method

cpg	365.39	J/mol×K	685.20	Joback Method
cpg	374.79	J/mol×K	716.93	Joback Method
hvapt	56.20	kJ/mol	323.00	NIST Webbook

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C929599&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

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