dl-Lysine

Inchi: InChI=1S/C6H14N2O2/c7-4-2-1-3-5(8)6(9)10/h5H,1-4,7-8H2,(H,9,10)
InchiKey: KDXKERNSBIXSRK-UHFFFAOYSA-N
Formula: C6H14N2O2
SMILES: NCCCCC(N)C(=O)O
Mol. weight [g/mol]: 146.19
CAS: 70-54-2

Physical Properties

Property code	Value	Unit	Source
chs	-3683.20 ± 1.50	kJ/mol	NIST Webbook
gf	-135.64	kJ/mol	Joback Method
hf	-369.68	kJ/mol	Joback Method
hfus	23.85	kJ/mol	Joback Method
hvap	73.27	kJ/mol	Joback Method
log10ws	-0.41		Crippen Method
logp	-0.473		Crippen Method
mcvol	122.800	ml/mol	McGowan Method
pc	4345.39	kPa	Joback Method
tb	627.35	K	Joback Method
tc	821.14	K	Joback Method
tf	419.65	K	Joback Method
vc	0.449	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	327.73	J/mol×K	627.35	Joback Method
cpg	337.15	J/mol×K	659.65	Joback Method
cpg	346.06	J/mol×K	691.95	Joback Method
cpg	354.49	J/mol×K	724.25	Joback Method
cpg	362.45	J/mol×K	756.54	Joback Method
cpg	369.96	J/mol×K	788.84	Joback Method
cpg	377.03	J/mol×K	821.14	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C70542&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

Legend

chs:	Standard solid enthalpy of combustion
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
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