Adipamide

Other names:	Hexanediamide
	Adipic acid amide
	Adipic acid diamide
	Adipic diamide
	NCI-C02095
	1,4-Butanedicarboxamide
Inchi:	InChI=1S/C6H12N2O2/c7-5(9)3-1-2-4-6(8)10/h1-4H2,(H2,7,9)(H2,8,10)
InchiKey:	GVNWZKBFMFUVNX-UHFFFAOYSA-N
Formula:	C6H12N2O2
SMILES:	NC(=O)CCCCC(N)=O
Mol. weight [g/mol]:	144.17
CAS:	628-94-4

Physical Properties

Property code	Value	Unit	Source
gf	-125.30	kJ/mol	Joback Method
hf	-324.75	kJ/mol	Joback Method
hfus	24.89	kJ/mol	Joback Method
hvap	63.72	kJ/mol	Joback Method
log10ws	-0.75		Crippen Method
logp	-0.483		Crippen Method
mcvol	118.500	ml/mol	McGowan Method
pc	4140.93	kPa	Joback Method
tb	589.48	K	Joback Method
tc	799.71	K	Joback Method
tf	423.76	K	Joback Method
vc	0.442	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	294.16	J/mol×K	589.48	Joback Method
cpg	304.16	J/mol×K	624.52	Joback Method
cpg	313.58	J/mol×K	659.56	Joback Method

cpg	322.45	J/mol×K	694.60	Joback Method
cpg	330.78	J/mol×K	729.64	Joback Method
cpg	338.60	J/mol×K	764.68	Joback Method
cpg	345.91	J/mol×K	799.71	Joback Method
hfust	52.72	kJ/mol	499.10	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C628944&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

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
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