

Adipic dihydrazide

Other names:	Adipic acid dihydrazide Adipyl hydrazide Adipic acid dihyrazide Hexanedioic acid, dihydrazide 403 adipohydrazide
Inchi:	InChI=1S/C6H14N4O2/c7-9-5(11)3-1-2-4-6(12)10-8/h1-4,7-8H2,(H,9,11)(H,10,12)
InchiKey:	IBVAQQYNShjxbv-UHFFFAOYSA-N
Formula:	C6H14N4O2
SMILES:	<chem>NNC(=O)CCCC(=O)NN</chem>
Mol. weight [g/mol]:	174.20
CAS:	1071-93-8

Physical Properties

Property code	Value	Unit	Source
chs	-3868.80 ± 7.90	kJ/mol	NIST Webbook
gf	53.48	kJ/mol	Joback Method
hf	-217.81	kJ/mol	Joback Method
hfs	-493.10 ± 8.50	kJ/mol	NIST Webbook
hfus	35.09	kJ/mol	Joback Method
hvap	76.60	kJ/mol	Joback Method
log10ws	-1.11		Crippen Method
logp	-1.473		Crippen Method
mvol	138.460	ml/mol	McGowan Method
pc	4283.05	kPa	Joback Method
tb	689.82	K	Joback Method
tc	899.44	K	Joback Method
tf	529.08	K	Joback Method
vc	0.511	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	384.62	J/mol×K	689.82	Joback Method

cpg	394.62	J/mol×K	724.76	Joback Method
cpg	403.98	J/mol×K	759.69	Joback Method
cpg	412.72	J/mol×K	794.63	Joback Method
cpg	420.85	J/mol×K	829.57	Joback Method
cpg	428.41	J/mol×K	864.50	Joback Method
cpg	435.41	J/mol×K	899.44	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1071938&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
hfs:	Solid phase 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

Latest version available from:

<https://www.chemeo.com/cid/33-626-0/Adipic-dihydrazide.pdf>

Generated by Cheméo on 2024-04-28 15:17:02.726882738 +0000 UTC m=+16606671.647460050.

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