

Carbohydrazide

Other names:	Carbonic dihydrazide
	Carbazide
	Carbodihydrazide
	Carbonic acid, dihydrazide
	Carbonohydrazide
	Hydrazine, carbonylbis-
	Hydrazinecarboxamide, N-amino-
	Hydrazinecarboxylic acid, hydrazide
	Urea, N,N'-diamino-
	Carbazic acid, hydrazide
	Hydrazine, carbonyldi-
	Semicarbazide, 4-amino-
	Urea, 1,3-diamino-
	1,3-Diaminourea
	Cabazide
	1,3-Diaminomocovina
Inchi:	InChI=1S/CH6N4O/c2-4-1(6)5-3/h2-3H2,(H2,4,5,6)
InchiKey:	XEVRDFDBXJMZFG-UHFFFAOYSA-N
Formula:	CH6N4O
SMILES:	NNC(=O)NN
Mol. weight [g/mol]:	90.08
CAS:	497-18-7

Physical Properties

Property code	Value	Unit	Source
gf	140.30	kJ/mol	Joback Method
hf	-2.03	kJ/mol	Joback Method
hfus	20.54	kJ/mol	Joback Method
hvap	58.72	kJ/mol	Joback Method
log10ws	-0.22		Crippen Method
logp	-1.967		Crippen Method
mcvol	66.440	ml/mol	McGowan Method
pc	8101.62	kPa	Joback Method
tb	521.55	K	Joback Method
tc	741.57	K	Joback Method

tf	422.80	K	Joback Method
vc	0.226	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	152.51	J/mol×K	521.55	Joback Method
cpg	158.59	J/mol×K	558.22	Joback Method
cpg	164.30	J/mol×K	594.89	Joback Method
cpg	169.64	J/mol×K	631.56	Joback Method
cpg	174.64	J/mol×K	668.23	Joback Method
cpg	179.30	J/mol×K	704.90	Joback Method
cpg	183.63	J/mol×K	741.57	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C497187&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
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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