

Formic acid hydrazide

Other names:	Formylhydrazine Hydrazinecarboxaldehyde- Carbazaldehyde Formhydrazide Formic hydrazide Formohydrazide Formylhydrazide Hydrazine, formyl- N-Formylhydrazine Formal hydrazine Formhydrazid NSC 72391
Inchi:	InChI=1S/CH4N2O/c2-3-1-4/h1H,2H2,(H,3,4)
InchiKey:	XZBIXDPGRMLSTC-UHFFFAOYSA-N
Formula:	CH4N2O
SMILES:	NNC=O
Mol. weight [g/mol]:	60.06
CAS:	624-84-0

Physical Properties

Property code	Value	Unit	Source
gf	13.86	kJ/mol	Joback Method
hf	-62.29	kJ/mol	Joback Method
hfus	10.93	kJ/mol	Joback Method
hvap	41.62	kJ/mol	Joback Method
log10ws	0.37		Crippen Method
logp	-1.394		Crippen Method
mcvol	46.480	ml/mol	McGowan Method
pc	7305.14	kPa	Joback Method
tb	393.64	K	Joback Method
tc	592.76	K	Joback Method
tf	278.95	K	Joback Method
vc	0.172	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	85.19	J/mol×K	393.64	Joback Method
cpg	89.39	J/mol×K	426.83	Joback Method
cpg	93.40	J/mol×K	460.01	Joback Method
cpg	97.21	J/mol×K	493.20	Joback Method
cpg	100.84	J/mol×K	526.39	Joback Method
cpg	104.28	J/mol×K	559.57	Joback Method
cpg	107.54	J/mol×K	592.76	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C624840&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
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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