Cyacetacide

Other names:

Cyanoacetohydrazide
2-Cyanoacetylhydrazide
Cyanoacethydrazide
Cyanoacetic acid hydrazide
Acetic acid, cyano-, hydrazide
«alpha»-Cyanoacetohydrazide
(Cyanoacetyl)hydrazine
Armazal
AB-42
Cianazil
Cyacetacid
Cyacetazid
Cyacetazide
Cyanacethydrazide
Cyanacetic acid, hydrazide
Cyanacetohydrazide
Cyanacetylhydrazide
Cyanazide
Cyanizide
Cyanoacetylhydrazide
Cyanoethydrazide
Cyazid
Cyazide
Dictycide
Dictyzide
Helmox
Hidacian
Hidaciann
Leandin
Mackreazid
Malonitrile hydrazide
Malononitrile hydrazide
Neohydrazid
Reacid
Reazid
Reazide
Tsiazid
USAF KF-18
Kyanacethydrazid
(«alpha»-Cyanoacetyl)hydrazine

	2-Cyanoacethydrazide
	2-Cyanoacetohydrazide
	Alpha-cyanoacetic acid, hydrazide
	Cyanoacetic hydrazide
Inchi:	InChI=1S/C3H5N3O/c4-2-1-3(7)6-5/h1,5H2,(H,6,7)
InchiKey:	HPHBOJANXDKUQD-UHFFFAOYSA-N
Formula:	C3H5N3O
SMILES:	N#CCC(=O)NN
Mol. weight [g/mol]:	99.09
CAS:	140-87-4

Physical Properties

Property code	Value	Unit	Source
gf	134.48	kJ/mol	Joback Method
hf	34.31	kJ/mol	Joback Method
hfus	16.93	kJ/mol	Joback Method
hvap	56.57	kJ/mol	Joback Method
log10ws	-0.33		Crippen Method
logp	-1.110		Crippen Method
mcvol	76.040	ml/mol	McGowan Method
pc	5116.65	kPa	Joback Method
tb	546.69	K	Joback Method
tc	766.75	K	Joback Method
tf	374.41	K	Joback Method
vc	0.299	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	162.94	J/mol×K	546.69	Joback Method
cpg	168.72	J/mol×K	583.37	Joback Method
cpg	174.16	J/mol×K	620.04	Joback Method
cpg	179.27	J/mol×K	656.72	Joback Method
cpg	184.05	J/mol×K	693.40	Joback Method
cpg	188.51	J/mol×K	730.08	Joback Method
cpg	192.66	J/mol×K	766.75	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C140874&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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