Acetic acid, 2-ethylhydrazide

Inchi: InChI=1S/C4H10N2O/c1-3-5-6-4(2)7/h5H,3H2,1-2H3,(H,6,7)
InchiKey: UIWVQFSAXYWENY-UHFFFAOYSA-N
Formula: C4H10N2O
SMILES: CCNNC(C)=O
Mol. weight [g/mol]: 102.14
CAS: 20147-25-5

Physical Properties

Property code	Value	Unit	Source
gf	32.66	kJ/mol	Joback Method
hf	-131.53	kJ/mol	Joback Method
hfus	17.91	kJ/mol	Joback Method
hvap	44.12	kJ/mol	Joback Method
log10ws	-0.64		Crippen Method
logp	-0.353		Crippen Method
mcvol	88.750	ml/mol	McGowan Method
pc	4368.40	kPa	Joback Method
rinpol	977.00		NIST Webbook
tb	445.13	K	Joback Method
tc	633.82	K	Joback Method
tf	290.09	K	Joback Method
vc	0.336	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	180.74	J/mol×K	445.13	Joback Method
cpg	189.80	J/mol×K	476.58	Joback Method
cpg	198.45	J/mol×K	508.03	Joback Method
cpg	206.72	J/mol×K	539.48	Joback Method
cpg	214.60	J/mol×K	570.93	Joback Method
cpg	222.11	J/mol×K	602.38	Joback Method
cpg	229.25	J/mol×K	633.82	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C20147255&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume