Hydrazine, propyl-

Inchi: InChI=1S/C3H10N2/c1-2-3-5-4/h5H,2-4H2,1H3
InchiKey: UKPBXIFLSVLDPA-UHFFFAOYSA-N
Formula: C3H10N2
SMILES: CCCNN
Mol. weight [g/mol]: 74.12
CAS: 5039-61-2

Physical Properties

Property code	Value	Unit	Source
gf	130.22	kJ/mol	Joback Method
hf	-17.99	kJ/mol	Joback Method
hfus	13.82	kJ/mol	Joback Method
hvap	39.35	kJ/mol	Joback Method
log10ws	-0.69		Crippen Method
logp	-0.140		Crippen Method
mcvol	73.090	ml/mol	McGowan Method
pc	4849.43	kPa	Joback Method
rinpol	714.00		NIST Webbook
tb	390.74	K	Joback Method
tc	579.02	K	Joback Method
tf	259.49	K	Joback Method
vc	0.268	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	139.67	J/mol×K	390.74	Joback Method
cpg	147.88	J/mol×K	422.12	Joback Method
cpg	155.75	J/mol×K	453.50	Joback Method
cpg	163.29	J/mol×K	484.88	Joback Method
cpg	170.50	J/mol×K	516.26	Joback Method
cpg	177.40	J/mol×K	547.64	Joback Method
cpg	183.99	J/mol×K	579.02	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5039612&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