Hydrazine, (pentafluorophenyl)-

Other names: (Pentafluorophenyl)hydrazine
Inchi: InChI=1S/C6H3F5N2/c7-1-2(8)4(10)6(13-12)5(11)3(1)9/h13H,12H2
InchiKey: BYCUWCJUPSUFBX-UHFFFAOYSA-N
Formula: C6H3F5N2
SMILES: NNc1c(F)c(F)c(F)c(F)c1F
Mol. weight [g/mol]: 198.09
CAS: 828-73-9

Physical Properties

Property code	Value	Unit	Source
gf	-754.31	kJ/mol	Joback Method
hf	-881.28	kJ/mol	Joback Method
hfus	29.09	kJ/mol	Joback Method
hvap	47.53	kJ/mol	Joback Method
log10ws	-3.14		Crippen Method
logp	1.668		Crippen Method
mcvol	100.450	ml/mol	McGowan Method
pc	3488.88	kPa	Joback Method
rinpol	1164.00		NIST Webbook
rinpol	1164.00		NIST Webbook
tb	507.31	K	Joback Method
tc	690.96	K	Joback Method
tf	385.27	K	Joback Method
vc	0.417	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	227.87	J/mol×K	507.31	Joback Method
cpg	234.69	J/mol×K	537.92	Joback Method
cpg	241.22	J/mol×K	568.53	Joback Method
cpg	247.46	J/mol×K	599.14	Joback Method
cpg	253.42	J/mol×K	629.75	Joback Method
cpg	259.09	J/mol×K	660.35	Joback Method

cpg	264.47	J/mol×K	690.96	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C828739&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume