Cyclopentane, nitro-

Other names: Nitrocyclopentane
Inchi: InChI=1S/C5H9NO2/c7-6(8)5-3-1-2-4-5/h5H,1-4H2
InchiKey: CJSZWOGCKKDSJG-UHFFFAOYSA-N
Formula: C5H9NO2
SMILES: O=[N+]([O-])C1CCCC1
Mol. weight [g/mol]: 115.13
CAS: 2562-38-1

Physical Properties

Property code	Value	Unit	Source
gf	63.32	kJ/mol	Joback Method
hf	-96.81	kJ/mol	Joback Method
hfus	14.00	kJ/mol	Joback Method
hvap	43.57	kJ/mol	Joback Method
log10ws	-2.01		Crippen Method
logp	1.206		Crippen Method
mcvol	87.870	ml/mol	McGowan Method
pc	4409.10	kPa	Joback Method
tb	453.20	K	NIST Webbook
tc	720.64	K	Joback Method
tf	300.62	K	Joback Method
vc	0.339	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	191.70	J/mol×K	480.92	Joback Method
cpg	205.13	J/mol×K	520.87	Joback Method
cpg	217.64	J/mol×K	560.83	Joback Method
cpg	229.29	J/mol×K	600.78	Joback Method
cpg	240.10	J/mol×K	640.74	Joback Method
cpg	250.12	J/mol×K	680.69	Joback Method
cpg	259.40	J/mol×K	720.64	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2562381&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume