Pentanal, (2,4-dinitrophenyl)hydrazone

Other names: Valeraldehyde, (2,4-dinitrophenyl)hydrazone
n-Pentanal, 2,4-dinitrophenylhydrazone
Inchi: InChI=1S/C11H14N4O4/c1-2-3-4-7-12-13-10-6-5-9(14(16)17)8-11(10)15(18)19/h5-8,13H
InchiKey: XGVOZGLOQUHZBZ-UHFFFAOYSA-N
Formula: C11H14N4O4
SMILES: CCCCC=NNc1ccc([N+](=O)[O-])cc1[N+](=O)[O-]
Mol. weight [g/mol]: 266.25
CAS: 2057-84-3

Physical Properties

Property code	Value	Unit	Source
hf	57.39	kJ/mol	Joback Method
hvap	86.61	kJ/mol	Joback Method
log10ws	-4.61		Crippen Method
logp	3.091		Crippen Method
mcvol	192.590	ml/mol	McGowan Method
pc	2400.57	kPa	Joback Method
rinpol	2472.00		NIST Webbook
tb	918.25	K	Joback Method
tc	1175.55	K	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2057843&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

hf:	Enthalpy of formation 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