Butanal, 3-methyl-, (2,4-dinitrophenyl)hydrazone

Other names: Isovaleraldehyde, (2,4-dinitrophenyl)hydrazone
Butyraldehyde, 3-methyl-, (2,4-dinitrophenyl)hydrazone
Isovaleraldehyde dnp
Isovaleraldehyde, 2,4-dinitrophenylhydazone

Inchi: InChI=1S/C11H14N4O4/c1-8(2)5-6-12-13-10-4-3-9(14(16)17)7-11(10)15(18)19/h3-4,6-8,

InchiKey: MCWYOPWJODIZJK-UHFFFAOYSA-N

Formula: C11H14N4O4

SMILES: CC(C)CC=NNc1ccc([N+](=O)[O-])cc1[N+](=O)[O-]

Mol. weight [g/mol]: 266.25

CAS: 2256-01-1

Physical Properties

Property code	Value	Unit	Source
hf	52.11	kJ/mol	Joback Method
hvap	86.22	kJ/mol	Joback Method
log10ws	-4.37		Crippen Method
logp	2.947		Crippen Method
mcvol	192.590	ml/mol	McGowan Method
pc	2419.50	kPa	Joback Method
rinpol	2410.00		NIST Webbook
rinpol	2410.00		NIST Webbook
tb	917.81	K	Joback Method
tc	1179.23	K	Joback Method

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2256011&Units=SI

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