Propanal, 2-methyl-, (2,4-dinitrophenyl)hydrazone

Other names: Isobutyraldehyde, 2,4-dinitrophenylhydrazone
2-Methylpropanal (2,4-dinitrophenyl)hydrazone
Propanal, 2-methyl-, 2-(2,4-dinitrophenyl)hydrazone
Isobutanal 2,4-dinitrophenylhydrazone

Inchi: InChI=1S/C10H12N4O4/c1-7(2)6-11-12-9-4-3-8(13(15)16)5-10(9)14(17)18/h3-7,12H,1-2

InchiKey: WYSDOKPZMGYVGI-UHFFFAOYSA-N

Formula: C10H12N4O4

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

Mol. weight [g/mol]: 252.23

CAS: 2057-82-1

Physical Properties

Property code	Value	Unit	Source
hf	72.75	kJ/mol	Joback Method
hvap	84.00	kJ/mol	Joback Method
log10ws	-3.95		Crippen Method
logp	2.557		Crippen Method
mcvol	178.500	ml/mol	McGowan Method
pc	2665.27	kPa	Joback Method
rinpol	2312.00		NIST Webbook
tb	894.93	K	Joback Method
tc	1161.43	K	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2057821&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