# 3,3-Dimethyl-2-butanone, 2,4-dinitrophenyl hydrazone

**Other names:** 2-Butanone, 3,3-dimethyl-, (2,4-dinitrophenyl)hydrazone
**Inchi:** InChI=1S/C12H16N4O4/c1-8(12(2,3)4)13-14-10-6-5-9(15(17)18)7-11(10)16(19)20/h5-7,1
**InchiKey:** OMNJXFSXEYYSRY-UHFFFAOYSA-N
**Formula:** C12H16N4O4
**SMILES:** CC(=NNc1ccc([N+](=O)[O-])cc1[N+](=O)[O-])C(C)(C)C
**Mol. weight [g/mol]:** 280.28
**CAS:** 964-53-4

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| hf | 18.21 | kJ/mol | Joback Method |
| hvap | 87.62 | kJ/mol | Joback Method |
| log10ws | -4.79 | | Crippen Method |
| logp | 3.337 | | Crippen Method |
| mcvol | 206.680 | ml/mol | McGowan Method |
| pc | 2239.76 | kPa | Joback Method |
| rinpol | 2433.00 | | NIST Webbook |
| tb | 937.78 | K | Joback Method |
| tc | 1205.87 | 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=C964534&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 |