

# 2-Propenal, 3-phenyl-, (2,4-dinitrophenyl)hydrazone

|                      |   |
|----------------------|---|
| Other names:         | Cinnamaldehyde, (2,4-dinitrophenyl)hydrazone                                    |
| Inchi:               | InChI=1S/C15H12N4O4/c20-18(21)13-8-9-14(15(11-13)19(22)23)17-16-10-4-7-12-5-2-1 |
| InchiKey:            | RLSRMSQNTNYDMC-JEVKGGJXSA-N   |
| Formula:             | C15H12N4O4  |
| SMILES:              | O=[N+](=[O-])c1ccc(NN=CC=Cc2cccc2)c([N+]([O-])([O-])c1                          |
| Mol. weight [g/mol]: | 312.28  |
| CAS:                 | 1237-69-0   |

## Physical Properties

| Property code | Value   | Unit   | Source         |
|---------------|---------|--------|----------------|
| hf            | 328.58  | kJ/mol | Joback Method  |
| hvap          | 97.75   | kJ/mol | Joback Method  |
| log10ws       | -5.41   |        | Crippen Method |
| logp          | 3.614   |        | Crippen Method |
| mcvol         | 220.890 | ml/mol | McGowan Method |
| pc            | 2398.22 | kPa    | Joback Method  |
| tb            | 1040.61 | K      | Joback Method  |
| tc            | 1325.77 | K      | Joback Method  |

## Sources

|                 |   |
|-----------------|---|
| McGowan Method: | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                       |
| NIST Webbook:   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C1237690&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1237690&amp;Units=SI</a> |
| Crippen Method: | <a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>                                   |
| Crippen Method: | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                           |
| Joback Method:  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                       |

## Legend

|       |   |
|-------|---|
| hf:   | Enthalpy of formation at standard conditions    |
| hvap: | Enthalpy of vaporization at standard conditions |

|                 |                                     |
|-----------------|-------------------------------------|
| <b>log10ws:</b> | Log10 of Water solubility in mol/l  |
| <b>logp:</b>    | Octanol/Water partition coefficient |
| <b>mcvol:</b>   | McGowan's characteristic volume     |
| <b>pc:</b>      | Critical Pressure                   |
| <b>tb:</b>      | Normal Boiling Point Temperature    |
| <b>tc:</b>      | Critical Temperature                |

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