

# 2,4,6(1H,3H,5H)-Pyrimidinetrione, 1,3-dimethyl-5-(1-methylbutyl)-5-(2-propenyl)-

Other names:

Barbituric acid, 5-allyl-1,3-dimethyl-5-(1-methylbutyl)-  
N,N-Dimethylquinalbarbitone  
1,3-Dimethylsecobarbital  
5-Allyl-1,3-dimethyl-5-(1-methylbutyl)-2,4,6(1H,3H,5H)-pyrimidinetrione  
Secobarbital, 1,3-dimethyl  
Secobarbital, (bis-Me)  
Secobarbital permethylated  
Secobarbital Me

**Inchi:** InChI=1S/C14H22N2O3/c1-6-8-10(3)14(9-7-2)11(17)15(4)13(19)16(5)12(14)18/h7,10H,2

**InchiKey:** KKPCLTFASPTTIQ-UHFFFAOYSA-N

**Formula:** C14H22N2O3

**SMILES:** C=CCC1(C(C)CCC)C(=O)N(C)C(=O)N(C)C1=O

**Mol. weight [g/mol]:** 266.34

**CAS:** 28239-49-8

## Physical Properties

| Property code | Value   | Unit   | Source         |
|---------------|---------|--------|----------------|
| log10ws       | -2.39   |        | Crippen Method |
| logp          | 2.035   |        | Crippen Method |
| mcvol         | 217.630 | ml/mol | McGowan Method |
| rinpol        | 1680.00 |        | NIST Webbook   |
| rinpol        | 1680.00 |        | NIST Webbook   |
| rinpol        | 1680.00 |        | NIST Webbook   |
| rinpol        | 1699.00 |        | NIST Webbook   |
| rinpol        | 1670.00 |        | NIST Webbook   |

## Sources

**McGowan Method:** <http://link.springer.com/article/10.1007/BF02311772>

**NIST Webbook:** <http://webbook.nist.gov/cgi/cbook.cgi?ID=C28239498&Units=SI>

**Crippen Method:** <http://pubs.acs.org/doi/abs/10.1021/ci990307l>

**Crippen Method:** [https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)

# Legend

|                 |                                     |
|-----------------|-------------------------------------|
| <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>rinpol:</b>  | Non-polar retention indices         |

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