



STATUS DECISION OF CONTROLLED AND NON-CONTROLLED SUBSTANCE(S)

Substance: 5-(9-anthracenylmethylene) barbituric acid, 5-(anilinomethylene) barbituric acid, 1,3-dimethyl-5-(1-naphthylmethylene) barbituric acid, 1,3-dimethyl-5-(2-thienylidene) barbituric acid, 1,3-dimethyl-5-(3-indolylmethylene) barbituric acid, 5-(2-hydroxy-1-naphthylmethylene) barbituric acid, and 5-(4-hydroxy-3-methoxybenzylidene) barbituric acid

Based on the current information available to the Office of Controlled Substances, it appears that the above substance are:

Controlled X
Not Controlled []

under the schedules of the Controlled Drugs and Substances Act (CDSA) for the following reason(s):

- The above named substances have the root structure of the barbiturate family and therefore included in item 1 of Schedule IV to the CDSA.

Prepared by: Evelyn Soo Date:

Verified by: See email MICHAEL LEBELLE Date:

Approved by: DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES Date:

Drug Status Report

Drug: 5-methyl-5phenyl-phenobarbital

- I - 5-(9-anthracenylmethylene) barbituric acid
- II - 5-(anilinomethylene) barbituric acid
- III - 1,3-dimethyl-5-(1-naphthylmethylene) barbituric acid
- IV - 1,3-dimethyl-5-(2-thienylidene) barbituric acid
- V - 1,3-dimethyl-5-(3-indolylmethylene) barbituric acid
- VI - 5-(2-hydroxy-1-naphthylmethylene) barbituric acid
- VII - 5-(4-hydroxy-3-methoxybenzylidene) barbituric acid

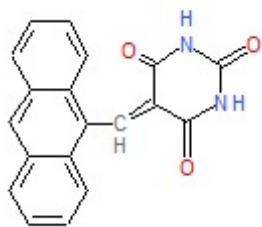
Drug Name Status:

- I - 5-(9-anthracenylmethylene) barbituric acid
- II - 5-(phenylamino)methylene barbituric acid
- III - 1,3-dimethyl-5-(1-naphthylmethylene) barbituric acid
- IV - 1,3-dimethyl-5-(2-thienyl)methylene barbituric acid
- V - 1,3-dimethyl-5-(3-indolylmethylene) barbituric acid
- VI - 5-(2-hydroxy-1-naphthylmethylene) barbituric acid
- VII - 5-(4-hydroxy-3-methoxybenzylidene) barbituric acid are common names.

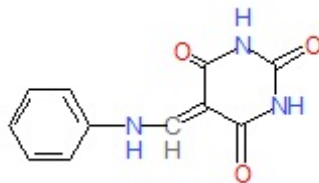
Chemical Name:

- I - 5-(9-anthracenylmethylene)-2,4,6(1H,3H,5H)-pyrimidinetrione
- II - 5-(phenylamino)methylene-2,4,6(1H,3H,5H)-pyrimidinetrione
- III - 1,3-dimethyl-5-(1-naphthylmethylene)-2,4,6(1H,3H,5H)-pyrimidinetrione
- IV - 1,3-dimethyl-5-(2-thienyl)methylene-2,4,6(1H,3H,5H)-pyrimidinetrione
- V - 1,3-dimethyl-5-(3-indolylmethylene)-2,4,6(1H,3H,5H)-pyrimidinetrione
- VI - 5-(2-hydroxy-1-naphthylmethylene)-2,4,6(1H,3H,5H)-pyrimidinetrione
- VII - 5-(4-Hydroxy-3-methoxybenzylidene)-2,4,6(1H,3H,5H)-pyrimidinetrione

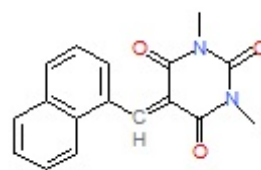
Chemical structure:



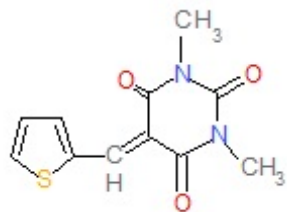
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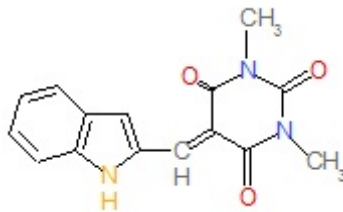
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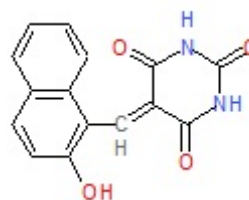
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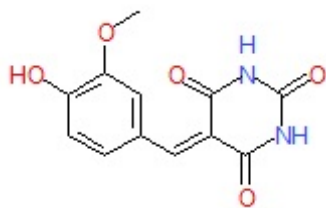
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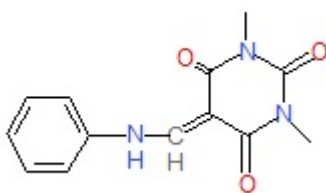
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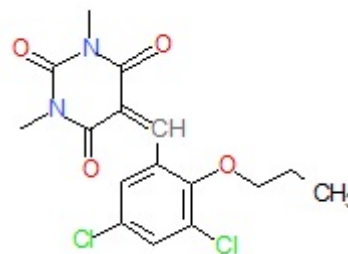
VI



VII



VIII



IX

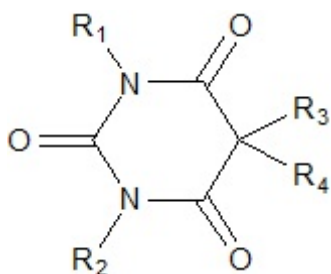
Molecular Formula:I - C₁₉H₁₂N₂O₃II - C₁₁H₉N₃O₃III - C₁₇H₁₄N₂O₃IV - C₁₁H₁₀N₂O₃SV - C₁₅H₁₃N₃O₃VI - C₁₅H₁₀N₂O₄VII - C₁₂H₁₀N₂O₅**Pharmacological or Chemical class / Application:** barbiturates**International status:**

US: The substances are not currently listed on the US Controlled Substances Act and are not mentioned on the DEA website. However, barbituric acid derivatives are included in Schedule III to the CSA which would include the above substances.

United Nations: The substances not listed on the Yellow List - List of Narcotic Drugs under International Control. The substances are not listed on the Green List - List of Psychotropic Substances under International Control.

Canadian Status: The substances are currently not listed specifically on the CDSA. However, on the basis of their chemical structures the substances are

considered a member of the barbiturate family since they contain the characteristic root structure of the barbiturates i.e.



where R_1 , R_2 , R_3 , and R_4 are various chemical substituents that differentiate the barbiturates, and where the R groups in the case of barbituric acid are hydrogen (H). Accordingly, substances **I** to **VII** are captured under Item 1 of Schedule IV to the CDSA “Barbiturates, their salts and derivatives.”

It is noteworthy that status decisions were recently made on 5-(Anilinomethylene)-1,3-dimethylbarbituric acid (**VIII**) and 5-(3,5-Dichloro-2-propoxy-benzylidene)-pyrimidine-2,4,6-trione (**IX**) and these substances were considered to be controlled on the basis of the substance having the root structure of the barbiturate family.

Recommendation: 5-(9-anthracenylmethylene) barbituric acid, 5-(anilinomethylene) barbituric acid, 1,3-dimethyl-5-(1-naphthylmethylene) barbituric acid, 1,3-dimethyl-5-(2-thienylidene) barbituric acid, 1,3-dimethyl-5-(3-indolylmethylene) barbituric acid, 5-(2-hydroxy-1-naphthylmethylene) barbituric acid, and 5-(4-hydroxy-3-methoxybenzylidene) barbituric acid are included in item 1 of Schedule IV to the CDSA and are controlled substances.

December 3rd, 2009.