Drug Status Report

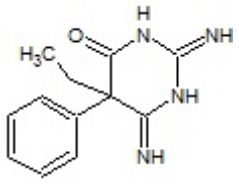
Drug: Phenobarbital related substances

2,4-Dimino-6-one phenobarbital (I)
4-Imino-2,6-diketo phenobarbital (II)
Methyl ethyl phenyl cyanoacetate (III)

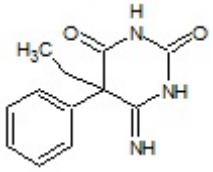
Drug Name Status: The above names are common names.

Chemical Name: (I) 5-Ethyl-5-phenyl-2,4-diamino-(5H)-pyrimidine-6-one
(II) 5-Ethyl-5-phenyl-4-diamino-(5H)-pyrimidine-2,6-dione
(III) Methyl 2-cyano-2-phenyl-butanoate

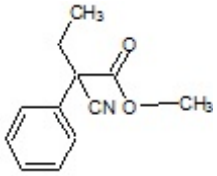
Chemical structure:



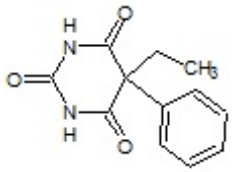
I



II



III



Phenobarbital

Molecular Formula: (I) $C_{12}H_{14}N_4O$
(II) $C_{12}H_{13}N_3O_2$
(III) $C_{12}H_{13}NO_2$

Pharmacological class / Application: pharmaceutical related substance

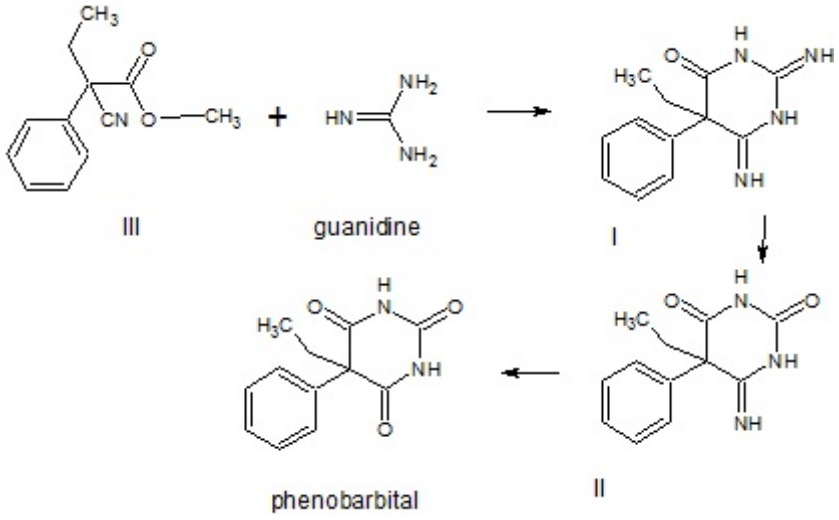
International status:

US: The substances are not listed on the schedules to the CSA and are not mentioned on the DEA website.

United Nations: The substances are not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International

Control.

Canadian Status: None of substances I to III is not listed on the schedules to the CDSA. They are structurally similar to phenobarbital. Chemically, they are not barbiturates. Substances I to III are precursors in the synthesis of phenobarbital according to the scheme below.



Recommendation: 2,4-Dimino-6-one phenobarbital (I), 4-imino-2,6-diketo phenobarbital (II) and methyl ethyl phenyl cyanoacetate (III) are not included in the schedules to the CDSA and are not controlled substances.

February 5, 2009