



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

Substance: I - Fentanyl N-oxide
II - Pyruvyl fentanyl
III - Butyryl Fentayl

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

Controlled [checked]
Not Controlled [unchecked]

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

- The substances are degradation products of fentanyl and included under item 16(5) of Schedule I to the CDSA.

Prepared by: Evelyn Soo Date: Dec 2nd 2010

Verified by: Marianne Tang Date:

Approved by: DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES Date:

This status was requested by: Wissam Sader

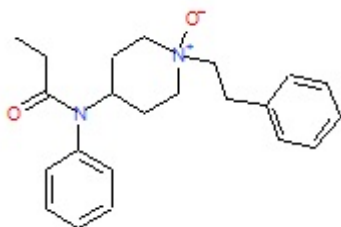
Drug Status Report

Drug: I - Fentanyl-N-oxide
II - Pyruvyl Fentanyl
III - Butyryl Fentanyl

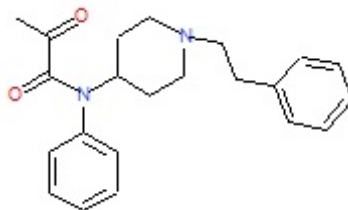
Drug Name Status: I - Fentanyl-1-N-oxide
II - Pyruvyl Fentanyl
III - Butyryl Fentanyl are the common names.

Chemical Name: I - N-(1-phenethyl-4-piperidyl)propionanilide, 1-oxide
II - 2-oxo-N-(1-phenethyl-4-piperidyl)-N-phenyl-propanamide
III - N-(1-phenethyl-4-piperidyl)-N-phenyl-butanamide

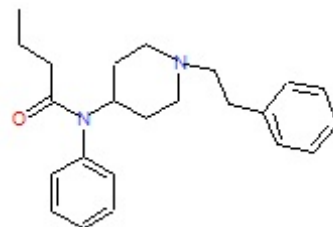
Chemical structure:



I



II



III

Molecular Formula: I - $C_{22}H_{28}N_2O_2$; II - $C_{22}H_{26}N_2O_2$; III - $C_{23}H_{30}N_2O$

CAS-RN: I - 85893-37-4; II - NONE; III - NONE

Pharmacological class / Application: Degradation products of fentanyl

International status:

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

United Nations: The substances are not listed on the Yellow List - List of Narcotic Drugs under International Control, the Green List - List of Psychotropic Substances under International Control, nor the Red List - List of Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control.

Canadian Status: The above substances are not listed in the CDSA. However, they have been reported in the scientific literature to be degradation products of fentanyl and therefore are captured under the heading “Fentanyls, their salts, derivatives, and analogues and salts of derivatives and analogues, including” of item 16 of Schedule I to the CDSA as derivatives of fentanyl. In addition, the above three substances contain the core structure of the fentanyls included under item 16 of Schedule I.

Recommendation: Fentanyl-N-oxide, pyruvyl fentanyl and butyryl fentanyl are included under item 16(5) of Schedule I to the CDSA and are controlled substances.

Date: 2 December 2010