



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

Substance: Despropionylfentanyl

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

Controlled
Not Controlled

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

- The substance does not contain the root structure of the fentanyl and therefore is not included under item 16 of Schedule I to the CDSA.

Prepared by: _____ Date: July 27th 2010
Evelyn Soo

Verified by: _____ Date: _____
Marianne Tang

Approved by: _____ Date: _____
DIRECTOR, OFFICE OF CONTROLLED
SUBSTANCES

This status was requested by: A company wishing to synthesize fentanyl impurities.

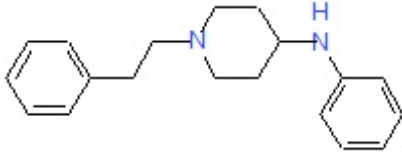
Drug Status Report

Drug: Despropionylfentanyl

Drug Name Status: Despropionylfentanyl is the common name.

Chemical Name: N-phenyl-1-(2-phenylethyl)-4-piperidinamine

Chemical structure:



Molecular Formula: C₁₉H₂₄N₂

CAS-RN: 21409-26-7

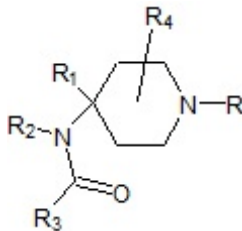
Pharmacological class / Application: Metabolite of fentanyl

International status:

US: The substance is not listed on the schedules to the CSA and is not mentioned on the DEA website.

United Nations: This substance is 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: Despropionylfentanyl is claimed to be a metabolite of fentanyl and is not currently listed in the CDSA. A review of the current family of fentanyls revealed that substances included under item 16 of Schedule I to the CDSA all contain the following root structure:



R=ethyl group substituted variously at the 1 and 2 position

R₁=hydrogen, methoxymethyl or carboxylate alkyl ester

R₂=phenyl or substituted phenyl

R₃=alkyl

R₄=hydrogen or alkyl

Despropionylfentanyl would *not* be considered to contain all the essential structural elements of the fentanyls and therefore, it would not be included 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.

The review of another metabolite of fentanyl, O-Demethylnoralfentanil, also determined that the substance would not be included under item 16 of Schedule I to the CDSA on the basis that it lacks the root structure of the fentanyls.

Recommendation: Despropionylfentanyl is not included under item 16 of Schedule I to the CDSA and is not a controlled substance.

July 27th 2010