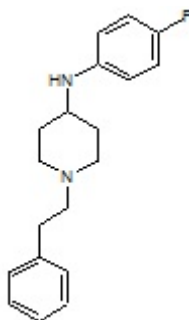


## Drug Status Report

**Drug:** p-Flourofentanyl synthetic intermediate

**Chemical Name:** 4-(4-Flourophénylamino)-N-(2-phenylethyl)piperidine

**Chemical structure:**



**Molecular Formula:** C<sub>19</sub>H<sub>23</sub>FN<sub>2</sub>

**Pharmacological class / Application:** fentanyl related substance

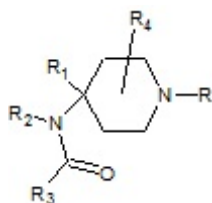
**International status:**

US: The substance is not currently listed on the schedules to the US Controlled Substances Act.

United Nations: The 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: Item 16 of Schedule I is "Fentanyls, their salts, derivatives and analogues and salts of derivatives and analogues." 4-(4-Flourophénylamino)-N-(2-phenylethyl)piperidine is structurally related to the fentanyls and therefore might be considered to be a member of the group of fentanyls.

A review of the current family of fentanyls indicates that all members have one common root structure that is shown below. In order to consider a substance a member of the fentanyl family of drugs and hence included in this item of Schedule I its structure must contain the elements of this root structure.



Fentanyl root  
structure

where

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

R<sub>1</sub>= hydrogen, methoxymethyl or carboxylate alkyl ester

R<sub>2</sub>= phenyl or substituted phenyl

R<sub>3</sub>= alkyl

R<sub>4</sub>= hydrogen or alkyl

The structure of 4-(4-fluorophenylamino)-N-(2-phenylethyl)piperidine does not comply with the requirements for R<sub>3</sub> as there is no amide.

Recommendation: 4-(4-Fluorophenylamino)-N-(2-phenylethyl)piperidine is not included in Item 16 of Schedule I and is not a controlled substance.

November 12, 2009