

## Drug Status Report

**Drug:** WXPT Series substances

A client requested the status of the following substances.

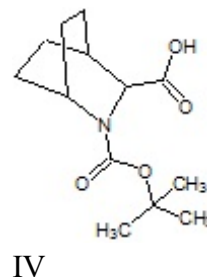
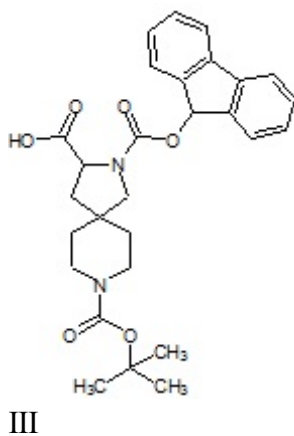
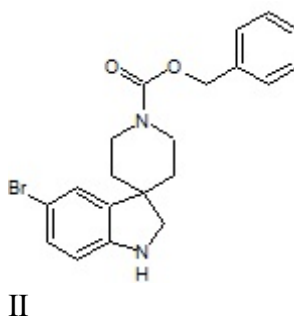
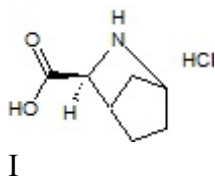
**Chemical Name:** I - (1R,3S,4R)-2-Azabicyclo[2.2.1]heptane-3-carboxylic acid hydrochloride (WXPT-BCAA-001)

II - Benzyl 5-bromo-1,2-dihydrospiro(indole-2,4'-piperidine)-1'-carboxylate (WXPT-SIZ-014)

III - 2,8-Diaza-spiro[4.5]decane-2,3,8-tricarboxylic acid 8-t-butyl ester 2-(9H-flouren-9-ylmethyl) ester  
WXPT-FBA-0011

IV - (S)-2-Azabicyclo[2.2.2]octane-2,3-dicarboxylic acid 2-t-butyl ester  
WXPT-BC-034

**Chemical structure:**



**Molecular Formula:** I -  $C_7H_{12}ClN_2O_2$

II -  $C_{20}H_{21}BrN_2O_2$

III -  $C_{28}H_{32}N_2O_6$

IV -  $C_{13}H_{21}NO_4$

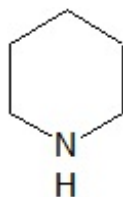
**Pharmacological class / Application:** fine chemical

**International status:**

US: The substances are not currently listed on the US Controlled Substances Act 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: These substances are piperidines in so far as their molecular structure contains a piperidine ring (below). It was the name piperidine that triggered a request from CBSA to determine the status of the substances under the CDSA.



Piperidine

Item 13 of Part I of Schedule IV to the CDSA is, "Piperidine and its salts." Substances I to IV are not salts of piperidine.

Many substances listed on the schedules to the CDSA contain a piperidine moiety. Item 3 of Schedule I, the phenylpiperidines, is a family of substances which is characterized by a phenyl or substituted phenyl group attached to the 4 position of a further substituted piperidine ring. None of substances I to IV can be considered a phenylpiperidine.

The phenylcyclohexylpiperidine (PCP) related substances often also contain a piperidine ring as an essential structural element. None of substances I to IV is a PCP related substance.

Similarly, the fentanyls contain a piperidine as an essential element. However, none of substances I to IV contains the other essential components of the fentanyl family.

Recommendation: Substances (I) through (IV) are not included in the schedules to the CDSA and are not controlled substances.

September 16, 2008