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

Substance:  D-phenylalaninol and N,O-Ditosyl D-Phenylalaninol

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 substances cannot be considered derivatives nor analogues of an amphetamine and therefore are not included in the schedules to the CDSA.

Prepared by: ________________________________  Date: Feb 23rd, 2011

Evelyn Soo

Verified by: ________________________________  Date: __________

Marianne Tang

Approved by: ________________________________  Date: __________

DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: “third party information removed as per agreement with applicant”
Drug Status Report

Drug:  
I - D-Phenylalaninol  
II - N,O-Ditosyl D-Phenylalaninol

Drug Name Status:  
I - (S)-Beta-aminobenzenepropanol  
II - II - N,O-Ditosyl D-Phenylalaninol are the common names.

Chemical Name:
I - L-2-amino-3-phenyl-1-propanol  
II - (S)-4-Methyl-N-[1-[[[(4-methylphenyl)sulfonyl]oxy]methyl]-2-phenylethyl]benzenesulfonamide

Other Names:  
I - (S)-2-Benzylethanolamine; L-2-amino-3-phenyl-propan-1-ol; L-phenylalaninol; S-phenylalaninol

Chemical structure:

\[
\begin{align*}
\text{I} & \quad \text{II} \\
\begin{array}{c}
\text{OH} \\
\text{NH}_2
\end{array} & \begin{array}{c}
\text{\textbf{S}} \\
\text{\textbf{O}}
\end{array}
\end{align*}
\]

Molecular Formula:  
I - C\text{\textsubscript{9}}H\text{\textsubscript{13}}NO\text{\textsubscript{3}}; II - C\text{\textsubscript{23}}H\text{\textsubscript{25}}NO\text{\textsubscript{5}}S\text{\subscript{2}}

Pharmacological class / Application:  
Amino alcohols

CAS-RN:  
I - 3182-95-4; II - 63328-00-7

International status:

US: D-Phenylalaninol and its ditosyl protected derivative are not listed specifically in the Schedules to the US Controlled Substances Act and is 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: D-Phenylalaninol and its ditosyl protected derivative are not listed specifically in the CDSA and are claimed to be used in the synthesis of lisdexamphetamine. While the D-phenylalaninol displays structural similarity to amphetamine, which is listed as sub-item 1(1) of Schedule III to the CDSA, the substance does not contain a methyl group in the alpha-position. Therefore, the substance and its ditosyl protected derivative cannot be considered to be analogues of amphetamine and are not included under item 1 of Schedule III to the CDSA.

**Recommendation:** D-Phenylalaninol and N,O-ditosyl D-phenylalaninol are not included in the schedules to the CDSA and are not controlled substances.

**Date:** 23 February 2011