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

Substance:  
I - Benzimidazole-2-carboxylic acid ethyl ester  
II - Benzimidazole-2-carboxylic acid

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 do not contain the root structure of the benzimidazoles and therefore cannot be included under item 13 of Schedule I to the CDSA.

Prepared by: _______________________________  Date: August 7th, 2012
Zack Li

Verified by: _______________________________  Date: ____________
Mark Kozlowski

Approved by: _______________________________  Date: ____________
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Bruno Lafontaine, OCS
Drug Status Report

**Drug:**
- I - Benzimidazole-2-carboxylic acid ethyl ester
- II - Benzimidazole-2-carboxylic acid

**Drug Name Status:**
- I - Benzimidazole-2-carboxylic acid ethyl ester
- II - Benzimidazole-2-carboxylic acid are the common names.

**Chemical Name:**
- I - ethyl 1H-benzo[d]imidazole-2-carboxylate
- II - 1H-benzo[d]imidazole-2-carboxylic acid

**Chemical structure:**

![Chemical structure](image)

**Molecular Formula:**
- I - C\(_{10}\)H\(_{10}\)N\(_2\)O\(_2\);
- II - C\(_8\)H\(_6\)N\(_2\)O\(_2\)

**Pharmacological class / Application:** Fine chemicals

**CAS-RN:**
- I - 1865-09-4;
- II - 2849-93-6

**International status:**

**US:** The substances 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:** Benzimidazole-2-carboxylic acid ethyl ester and benzimidazole-2-carboxylic acid are not listed in the CDSA. The substances are benzimidazoles but do not contain the structural elements of those listed under item 13 in Schedule I to the CDSA (see below) below:

![Chemical structure](image)

Clonitazene \(R_1=\text{NO}_2\), \(R_2=\text{Cl}\)
Etonitazene \(R_1=\text{NO}_2\), \(R_2=\text{OC}_2\text{H}_5\)
The status of a number of benzimidazoles have previously been reviewed and it was deemed that those which do not core the root structure of the above-mentioned benzimidazoles are not considered captured under item 13 “Benzimidazoles, their salts, derivatives and salts of derivatives including” of Schedule I to the CDSA. Since benzimidazole-2-carboxylic acid ethyl ester and benzimidazole-2-carboxylic acid do not contain the root structure of the benzimidazoles in schedule I, they cannot be included in the CDSA.

**Recommendation:** Benzimidazole-2-carboxylic acid ethyl ester and benzimidazole-2-carboxylic acid are not included in the schedules to the CDSA and are not controlled substances.

**Date:** August 7th, 2012