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

Substance: beta-Butyrolactone

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 is structurally similar to gamma-butyrolactone, which is listed as Item 18 in Part 1 of Schedule VI to the CDSA but cannot be included under Schedule VI as a Class A Precursor.

Prepared by: ___________________________ Date: October 12th, 2011
Vincent Marleau

Verified by: ___________________________ Date: __________
Mark Kozlowski

Approved by: ___________________________ Date: __________
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Jamie Wilson
Drug Status Report

Drug: beta-Butyrolactone

Drug Name Status: beta-Butyrolactone is the common name.

Chemical Name: lactone(1)-4-Methyloxetan-2-one.

Other Names: (I)-beta-Butyrolactone; 3-Hydroxybutanoic acid, beta-lactone; 3-Hydroxybutyric acid lactone; 4-Methyl-2-oxetanone; Hydroxybutyric acid; 2-Oxetanone, 4-methyl-; 4-Methyloxetan-2-one.

Chemical structure:

![Chemical structure of beta-Butyrolactone]

Molecular Formula: $C_4H_6O_2$

CAS-RN: 3068-88-0

Pharmacological class / Application: Fine Chemical

International status:

US: beta-Butyrolactone is not listed on the schedules to the US Controlled Substances Act and is not mentioned anywhere on the DEA website.

United Nations: The substance is 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: beta-Butyrolactone is not currently listed in the CDSA. However, the substance is structurally similar to gamma-butyrolactone, which is currently listed as Item 18 in Part 1 of Schedule VI to the CDSA and considered a Class A precursor. While the substance is structurally similar to gamma-butyrolactone, the listing of gamma-butyrolactone does not include its derivatives, isomers or analogues and therefore beta-butyrolactone cannot be included in the CDSA under this listing. The substance is also not similar in structure to any of the other substances included in the schedules to the CDSA.
Recommendation: beta-Butyrolactone is not included under any schedules to the CDSA and is not a controlled substance.

Date: October 12th, 2011