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

Substance: Dimethyl sulfone

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 a metabolite of dimethyl sulfoxide which is commonly found in food, and is also used as an industrial solvent as well as a diluent in the illicit manufacture of methamphetamine. However, the substance is not similar to any of the substances listed in the CDSA.

Prepared by: ___________________________ Date: April 20th 2011

Evelyn Soo

Verified by: ___________________________ Date: _________

Kim Barber

Approved by: ___________________________ Date: _________

DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Mark Kozlowski
Drug Status Report

Drug: Dimethyl sulfone

Drug Name Status: Dimethyl sulfone is the common name.

Chemical Name: 1,1'-sulfonylbis-methane

Other Names: Sulfonylbismethane; methylsulfonylmethane; methyl sulfone

Chemical structure:

\[
\begin{array}{c}
\text{O} \\
\text{S} \\
\text{O}
\end{array}
\]

Molecular Formula: C₂H₆O₂S

Pharmacological class / Application: Fine chemical

CAS-RN: 61-71-0

International status:

US: Dimethyl sulfone is not listed in the Controlled Substances Act. However, the DEA website cites that the substance is commonly used as a cutting agent in the illicit manufacture of methamphetamine¹.

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: Dimethyl sulfone is not listed in the schedules to the CDSA. The substance is an oxidation product of dimethyl sulfoxide (DMSO) and is mainly derived from dietary

¹http://www.deadiversion.usdoj.gov/chem_prog/advisories/methyl_sulfone.htm
The substance is also used as an industrial solvent and has been identified as a cutting agent or diluent in illicit samples of methamphetamine. However, dimethyl sulfone is not similar in structure to any of the substances included in the Schedules to the CDSA.

**Recommendation:** Dimethyl sulfone is not included in the Schedules to the CDSA is not a controlled substance.

**Date:** 20 April 2011

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