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

Substance: Dyphylline

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 not structurally similar to any those listed in the CDSA.

Prepared by: _________________________________ Date: February 6th, 2012

Vincent Marleau

Verified by: _________________________________ Date: __________

Mark Kozlowski

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:** Dyphylline

**Drug Name Status:** Dyphylline is the common name.

**Chemical Name:** 1H-Purine-2,6-dione, 7-(2,3-dihydroxypropyl)-3,7-dihydro-1,3-dimethyl-

**Other names:** Theophylline; Diprophylline; Asthmolysin; (+-)-7-(2,3-Dihydroxypropyl)theophylline; (1,2-Dihydroxy-3-propyl)thiophyllin; 1,3-Dimethyl-7-(2,3-dihydroxypropyl)xanthine; 7-(2,3-Dihydroxypropyl)theophylline.

**Chemical structure:**

![Chemical structure](image)

**Molecular Formula:** C_{10}H_{14}N_{4}O_{4}

**Pharmacological class / Application:** Bronchodilator

**CAS-RN:** 479-18-5

**International status:**

US: Dyphylline is not listed in 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: Dyphylline is not specifically in the schedules to the CDSA. The substance is used as a bronchodilator\(^1\) and does not display structural similarity to any of the substances listed in the CDSA.

**Recommendation:** Dyphylline is not included in any of the Schedules to the CDSA and is not considered a controlled substance.

**Date:** February 6th, 2012.

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