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

Substance: Curcumin (1,9-bis(4-hydroxy-3-methoxyphenyl)-2,7-nonadiene-4,6-dione)

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 the active component of the spice turmeric and is not similar to any of the substances listed in the CDSA.

Prepared by: ___________________________ Date: Sept 13th 2010
Evelyn Soo

Verified by: ___________________________ Date: __________
Marianne Tang

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

This status was requested by: Stephane Gelinas of the Inspectorate.
Drug Status Report

**Drug**: 1,9-bis(4-hydroxy-3-methoxyphenyl)-2,7-nonadiene-4,6-dione

**Drug Name Status**: Curcumin is the common name

**Chemical Name**: 1,7-bis(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione

**Other Names**: Natural yellow 3; Tumeric yellow; 1,5-Di(vanillylidene)acetylaceton; 1,5-Divannilylidene-2,4-pentandion

**Chemical structure:**

![Chemical Structure Image]

**Molecular Formula**: \(C_{21}H_{20}O_6\)

**Pharmacological class / Application**: Phytochemical

**International status:**

US: The substance 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 nor the Green List - List of Psychotropic Substances under International Control.

Canadian Status: 1,9-bis(4-hydroxy-3-methoxyphenyl)-2,7-nonadiene-4,6-dione is listed as an ingredient in NMDA, a nutritional supplement marketed for bodybuilding purposes\(^1\). The substance is more commonly known as curcumin, the active component of turmeric, and is obtained from the rhizome of *Curcuma longa*. Curcumin has been shown in the scientific

---

\(^1\) [http://musclewarfare.com/prod_nmda.html](http://musclewarfare.com/prod_nmda.html)
literature to display anti-inflammatory and anti-cancer activity, with promise in the management of colon cancer\(^2\). Curcumin is not currently listed in the CDSA and is not similar to any of the substances included in the Schedules to the CDSA.

Recommendation: Curcumin (1,9-bis(4-hydroxy-3-methoxyphenyl)-2,7-nonadiene-4,6-dione) is not included in the schedules to the CDSA and is not a controlled substance.

September 13\(^{th}\)