



Health
Canada

Santé
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**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

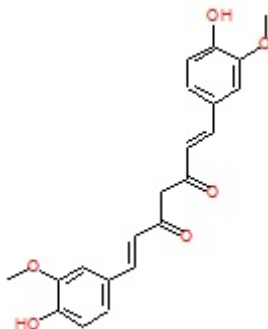
Drug: 1,9-bis(4-hydroxy-3-methoxyphenyl)-2,7-nonadiene-4,6-dione

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(vanillyliden)acetylaceton; 1,5-Divanillyliden-2,4-pentandion

Chemical structure:



Molecular Formula: C₂₁H₂₀O₆

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 purposes¹. 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

¹http://musclewarfare.com/prod_nmda.html

literature to display anti-inflammatory and anti-cancer activity, with promise in the management of colon cancer². 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 13th

²Watson, JL. et al. (2010) Curcumin causes superoxide anion production and p53-independent apoptosis in human colon cancer cells, *Cancer Lett.* **297**:1-8.