



Health
Canada

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

Substance: Menadione

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 synthetic form of Vitamin K and is not similar to any of those listed in the CDSA.

Prepared by: _____ Date: Oct 6th 2010
Evelyn Soo

Verified by: _____ Date: _____
Marianne Tang

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

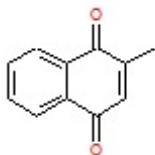
Drug: Menadione

Drug Name Status: Menadione is the proper name (INN).

Chemical Name: 2-methyl-1,4-Naphthalenedione

Other Names: 2-methyl-1,4-Naphthoquinone; 2-Methylnaphthoquinone; 3-Methyl-1,4-naphthoquinone

Chemical Structure:



Molecular Formula: C₁₁H₈O₂

Pharmacological class / Application: vitamin

CAS-RN: 58-27-5

International status:

US: The substance is not listed specifically in the CSA 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: Menadione is a synthetic form of vitamin K that is generally added to animal feed. The substance may also be formed *in vivo* via the removal of the phytyl side chain of phylloquinone, the dietary source of vitamin K¹. Menadione is not current listed in the CDSA and is not similar to any of the substances included in the Schedules to the CDSA.

Recommendation: Menadione is not included in the Schedules to the CDSA and is not a controlled substance.

Date: 6th October 2010

¹Rajabi, AA. *et al.* (2010) Measurement of menadione in urine by HPLC, J. Chromatogr. B. **878**:2457-2460.