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

Substance: 2-Palmitoylglycerol

Based on the current information available to the Office of Controlled Substances, it appears that the above substance is:

- Controlled ☐
- Not Controlled X

under the schedules of the Controlled Drugs and Substances Act (CDSA) for the following reason(s):

- The substance is an endocannabinoid showing no cannabinoid receptor agonist activity and cannot be included under the Schedules to the CDSA.

Prepared by: ____________________________ Date: ________________
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: 2-Palmitoylglycerol

Drug Name Status: 2-Palmitoylglycerol is the common name.

Chemical Name: 2-Hydroxy-1-(hydroxymethyl)ethyl hexadecanoic acid ester

Other Names: 2-Palm-Gl; 2-PG; 1,3-dihydroxypropan-2-yl palmitate.

Chemical structure:

![Chemical structure of 2-Palmitoylglycerol]

Molecular Formula: $\text{C}_{19}\text{H}_{38}\text{O}_4$  CAS-RN: 23470-00-0

Pharmacological class / Application: Endocannabinoid

International status:

US: 2-Palmitoylglycerol is not listed specifically in the Schedules to 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: 2-Palmitoylglycerol is not listed specifically in the CDSA. The substance is an endocannabinoid and has not shown to have any affinity for the $\text{CB}_1$ and $\text{CB}_2$ cannabinoid receptors and no cannabinoid receptor agonist activity.\(^1\) Cannabinoid receptor agonists are currently included under the heading “Cannabis, its preparations, derivatives and similar synthetic preparations” of item 1 in Schedule II to the CDSA, whereas cannabinoid receptor antagonists are specifically excluded. Given that 2-palmitoylglycerol does not demonstrate any cannabinoid receptor agonist activity, it cannot be included under item 1 of Schedule II to the CDSA.

Recommendation: 2-Palmitoylglycerol is not included in the Schedules to the CDSA and is not a controlled substance.

Date: June 5th, 2012.

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