Health Canada
Santé Canada

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

Substance: Cannabipiperidiethanone

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):

- It has not been established as to whether this substance is an efficacious cannabinoid receptor agonist and therefore it cannot be included under item 1 of Schedule II 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"

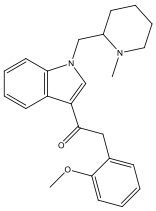
Drug Status Report

Drug: Cannabipiperidiethanone

Drug Name Status: Cannabipiperidiethanone is the common name.

Chemical Name: 2-(2-methoxyphenyl)-1-(1-((1-methylpiperidin-2-yl)methyl)-1H-indol-3-yl)ethanone

Chemical structure:



Molecular Formula: $C_{24}H_{28}N_2O_2$ **CAS-RN:** 1345970-43-5

Pharmacological class / Application: Synthetic cannabinoid

International status:

US: Cannabipiperidiethanone 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: Cannabipiperidiethanone is not listed in the CDSA. The substance is a synthetic cannabinnoid and has been identified in illegal "herbal products" in Japan in May of 2011.[1] "Cannabis, its preparations, derivative and similar synthetic preparations" are listed as item 1 in Schedule II to the CDSA. Cannabinoid receptor agonists have been declared to be included under item 1 of Schedule II to the CDSA while cannabinoid receptor antagonists are specifically excluded. Although cannabipiperidiethanone has been reported in the scientific literature to display low binding affinities for the CB_1 cannabinoid receptor (Ki= 591 nM) and the CB_2 cannabinoid receptor (Ki= 968 nM) [1], and that there is currently no information in the scientific literature on the efficacy of this substance as a cannabinoid receptor agonist, and therefore the substance cannot be included under item 1 of Schedule II to the CDSA.

Recommendation: Cannabipiperidiethanone is not included under Item 1 of Schedule II to the CDSA and is not controlled substance.

Date: September 10th, 2012.

---

[1] Uchiyama, N. *et* al. (2011) Identification of a Novel Cannabimimetic Phenylacetylindole, Cannabipiperidiethanone, as a Designer Drug in a Herbal Product and Its Affinity for Cannabinoid CB1 and CB2 Receptors, Chem Pharm Bull(Tokyo), **59(9):** 1203-1205.