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

Substance: Kynurenine

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 not structurally similar to any of the substances listed in the schedules to the CDSA.

Prepared by: _______________________________ Date: ________________
Evelyn C Soo

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:** Kynurenine

**Drug Name Status:** Kynurenine is the common name.

**Chemical Name:** α,2-Diamino-gamma-oxo-benzenebutanoic acid

**Other Names:** α-2-Diamino-gamma-oxobenzenebutyric acid

**Chemical structure:**

![Chemical structure of Kynurenine](image)

**Molecular Formula:** C_{10}H_{12}N_{2}O_{3}

**Pharmacological class / Application:** Non-proteinogenic amino acid

**CAS-RN:** 343-65-7

**International status:**

US: Kynurenine 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 Psychotrophic 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: Kynurenine is not listed in the Schedules to the CDSA. The substance has been reported in the scientific literature to be a non-proteinogenic amino acid that is involved in various biochemical signalling pathways and disease states\(^1\). It is also a major metabolite of tryptophan\(^2\). Kynurenine is not structurally similar to any of the substances included in the Schedules to the CDSA.

**Recommendation:** Kynurenine is not included in the schedules to the CDSA and is not a controlled substance.

**Date:** November 23\(^{rd}\), 2012.

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