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

Substance: 6,7-Dinitroquinoxaline-2,3-dione

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 similar in structure to any of those included 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: Tanya Arcand, OCS
Drug Status Report

**Drug:** 6,7-Dinitroquinoxaline-2,3-dione

**Drug Name Status:** 6,7-Dinitroquinoxaline-2,3-dione is the common name.

**Chemical Name:** 1,4-Dihydro-6,7-dinitro-2,3-quinoxalinedione

**Other Names:** DNQX; FG-9041

**Chemical structure:**

![Chemical structure of 6,7-Dinitroquinoxaline-2,3-dione]

**Molecular Formula:** C₈H₄N₄O₆

**CAS-RN:** 2379-57-9

**Pharmacological class / Application:** Quisqualate receptor antagonist

**International status:**

US: 6,7-Dinitroquinoxaline-2,3-dione 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: 6,7-Dinitroquinoxaline-2,3-dione is not listed in the schedules to the CDSA. The substance has been reported in the scientific literature to act as a potent antagonist of the quisqualate receptor¹ and is not structurally similar to any of the substances listed in the CDSA.

**Recommendation:** 6,7-Dinitroquinoxaline-2,3-dione is not included in the schedules to the CDSA and is not a controlled substance.

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¹ Rao, TS et al. (1990) 6,7-Dinitroquinoxaline-2,3-dione and 6-nitro,7-cyanoquinoxaline-2,3-dione antagonize responses mediated by N-methyl-D-aspartate and NMDA-associated glycine recognitions sites in vivo: Measurements of cerebellar cyclic-GMP, Neuropharmacol. 29:1031-1035.
Date: April 23rd, 2012.