Health Canada
Santé Canada

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

Substance: 1-Phenyl-2-nitropropene

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 those 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: Sandra Jarvis, RAPB

Drug Status Report

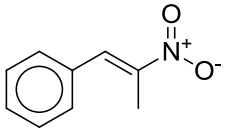
Drug: 1-Phenyl-2-nitropropene

Drug Name Status: 1-Phenyl-2-nitropropene is the common name.

Chemical Name: (2-Nitro-1-propenyl)benzene

Other Names: (2-Nitropropenyl)benzene; 1-(2-Nitropropenyl)benzene; 1-(2-Nitropropenyl)benzene; beta-Methyl-beta-nitrostyrene

Chemical structure:



Molecular Formula: $C_9H_9NO_2$

Pharmacological class / Application: Fine chemical

CAS-RN: 705-60-2

International status:

US: 1-Phenyl-2-nitropropene is not listed specifically in the Schedules to the US *Controlled Substances Act*. However, the substance is known to be used in the illicit manufacture of amphetamine and its identification in seized exhibits has been reported on the US DEA website[i].

United Nations: The substance is not listed on 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: 1-Phenyl-2-nitropropene is not listed in the schedules to the CDSA. The substance is known to be used in the illicit manufacture of amphetamine *via* the Knoevenagel or "nitrostyrene" route where 1-phenyl-2-nitropropene is prepared from benzaldehyde and nitroethane, and subsequently reduced to produce amphetamine[ii]. However, the substance is not structurally similar to any of those listed in the CDSA.

Recommendation: 1-Phenyl-2-nitropropene is not included in the Schedules to the CDSA and is not a controlled substance, nor a precursor chemical.

Date: September 11th, 2012.

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[i] http://www.justice.gov/dea/pr/micrograms/2007/mg0707.pdf

[ii]Collins, M. et al. (2010) $\delta^{13}C$ and $\delta^{2}H$ isotope ratios in amphetamine synthesized from benzaldehyde and nitroethane, Rapid Comm. Mass Spectrom. **24**:1653-1658.