

## Drug Status Report

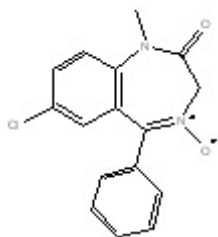
**Drug:** Methyldiazepinone N-oxide

**Drug Name Status:** 7-Chloro-1,3-dihydro-5-phenyl-1-methyl-2H-1,4-benzodiazepine-2-one, 4-oxide (**I**)

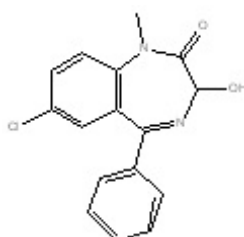
**Chemical Name:** 7-Chloro-1,3-dihydro-5-phenyl-1-methyl-2H-1,4-benzodiazepine-2-one, 4-oxide

**Other Names:** Methyldiazepinone 4-oxide; Diazepam N-oxide; Diazepam 4-oxide Methyl Diazepinone 4-oxide; 7-Chloro-1-methyl-5-phenyl-1H-1,4-benzodiazepine-2(3H)-one 4-oxide

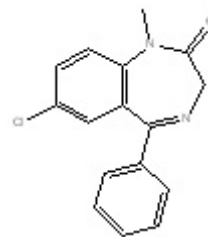
### Chemical structure:



I



Temazepam



Diazepam

**Molecular Formula:** C<sub>16</sub>H<sub>13</sub>ClN<sub>2</sub>O<sub>2</sub>

**CAS Number:** 2888-64-4

**Pharmacological class / Application:** Pharmaceutical related substance

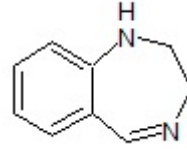
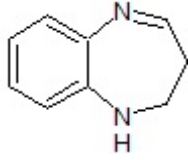
### International status:

**US:** The substance is not listed specifically in the Schedules to the CSA and is not mentioned on the DEA website..

**United Nations:** The substances are not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International Control.

**Canadian Status:** Methyldiazepinone N-oxide is not listed specifically in the CDSA. The substance is claimed to be an impurity of temazepam, which is listed as Item 18(30) of Schedule IV to the CDSA, under the heading "Benzodiazepines, their salts and derivatives".

With the exception of brotizolam, the benzodiazepines have a characteristic core structural feature. Two variations of the characteristic feature are shown below:



Based on the molecular structure of methyl diazepam N-oxide, the substance contains the core structure of the benzodiazepines and therefore is included under item 18 of Schedule IV.

**Recommendation:** Methyl diazepam N-oxide is included under Item 18 of Schedule IV to the CDSA and is a controlled substance.

August 9th, 2010