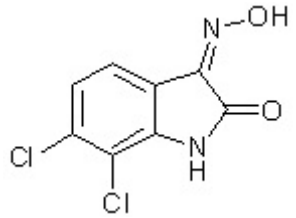
Drug Status Report

Drug: NS309

Drug Name Status: NS309 is the common name.

Chemical Name: 6,7-dichloro-1H-indole-2,3-dione 3-oxime

Chemical structure:



Molecular Formula: $C_8H_4Cl_2N_2O_2$

Pharmacological class / Application: Activator of the calcium activated- K^+ channels

International status:

US: NS309 is not listed on any of the schedules to the CSA and is not mentioned on the DEA website.

United Nations: NS309 is not listed on the Yellow List - List of Narcotic Drugs under International Control. The substance is not listed on the Green List - List of Psychotropic Substances under International Control.

Canadian Status: NS309 is a potent activator of calcium-activated potassium channels (K_{Ca} channels) of small and intermediate conductance i.e. the SK-and IK-channels, respectively, and is generally used to probe the physiological roles of SK/IL-channels in pharmacological studies[1]. The substance is not similar to any of the substances listed in the Schedules to the CDSA.

Recommendation: NS309 is not included in any of the Schedules to the CDSA and is not considered a controlled substance.

April 7th, 2010.

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[1]Strobaek, D. *et al.* (2004) Activation of human IK and SK Ca2+ activated K+ channels by NS309 (6,7-dichloro-1H-indole-2,3-dione 3-oxime), Biochim. Biophys. Acta, **1665**:1-5.