Drug Status Report

**Drug**: N-arachidonyl maleimide

**Drug Name Status**: N-arachidonyl maleimide is the common name.

**Chemical Name**: 1-(5Z,8Z,11Z,14Z)-5,8,11,14-eicosatetraen-1-yl-1H-pyrrole-2,5-dione

**Other Names**: NAM

**Chemical structure**:

![Chemical structure of N-arachidonyl maleimide](image)

**Molecular Formula**: $C_{24}H_{35}NO_2$

**Pharmacological class / Application**: Monoacylglycerol lipase inhibitor

**International status**:

**US**: N-arachidonyl maleimide is not listed on any of the schedules to the CSA and is not mentioned on the DEA website.

**United Nations**: N-arachidonyl maleimide 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**: N-arachidonyl maleimide is a selective monoacylglycerol lipase (MAGL) inhibitor which prevents the metabolic inactivation of 2-arachidonoylglycerol (2-AG) and increases the potency of 2-AG\(^1\). While the structure of N-arachidonyl maleimide is similar to some cannabinoid related substances, there is no evidence in the scientific literature to indicate that N-arachidonyl maleimide displays agonistic activity at the cannabinoid receptors and thus the substance is not included under Item 1 of Schedule II to the CDSA.

**Recommendation**: N-arachidonyl maleimide is not included in any of the Schedules to the CDSA and is not considered a controlled substance.

April 7\(^{th}\), 2010.

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