## Drug Status Report

Drug: Dihydrothebaine

**Drug Name Status**: Dihydrothebaine is the common name

Chemical Name: (5alpha)-6,7-Didehydro-4,5-epoxy-3,6-dimethoxy-17-methylmorphinan

## **Chemical structure:**

**Molecular Formula:** C<sub>19</sub>H<sub>23</sub>NO<sub>3</sub>

Pharmacological class / Application: morphinan

## **International status:**

US: Dihydrothebaine is not listed specifically on the schedules to the CSA. The Controlled Substances Act is broad in its specification of opiates: The term "opiate" means any drug or other substance having an addiction-forming or addiction-sustaining liability similar to morphine or being capable of conversion into a drug having such addiction-forming or addiction-sustaining liability." The "capable of conversion" could be interpreted to include hundreds of chemical substances. It is likely that the subject substance would be considered to be included in the CSA; confirmation of the status of the substance in the US would need to be obtained from the DEA.

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

Canadian Status: Subitem 1(4) of Schedule I to the CDSA is, "Thebaine (Paramorphine) and the salts, derivatives and salts of derivatives of the substances set out in subitems (1) to (4)". Dihydrothebaine may be prepared from thebaine¹ so it is a derivative of thebaine.

<sup>&</sup>lt;sup>1</sup> U.S. Pat. No. 3,812,132; in <a href="http://www.freshpatents.com/Process-for-the-synthesis-of-hydromorphone-dt20060112ptan20060009479.php">http://www.freshpatents.com/Process-for-the-synthesis-of-hydromorphone-dt20060112ptan20060009479.php</a>

Recommendation: Dihydrothebaine is included in Item 1 of Schedule I to the CDSA and is a controlled substance.

January 22, 2007