Drug Status Report

**Drug:**  
**I** - 2-Ethyl hexyl phosphoric acid ester  
**II** - Bis(2-ethylhexyl) phosphate

**Drug Name Status:**  
**I** - 2-Ethyl hexyl phosphoric acid ester is the common name  
**II** - Bis(2-ethylhexyl) phosphate is the common name.

**Chemical Name:**  
**I** - Phosphoric acid, 2-ethylhexyl ester  
**II** - Phosphoric acid, Bis(2-ethylhexyl ester)

**Other Names:**  
**I** - 2-ethylhexanol phosphate; 2-ethylhexyl phosphate  
**II** - Bis(2-ethylhexyl) hydrogen phosphate; Bis(2-ethylhexyl) phosphoric acid ester

**Chemical structure:**

![Chemical structures](image)

**Molecular Formula:**  
**I** - C$_8$H$_{19}$O$_4$P;  
**II** - C$_{16}$H$_{35}$O$_4$P

**Pharmacological class / Application:** Organophosphates

**International status:**

US: The substances are not listed on the schedules to the CSA and are not mentioned on the DEA website.

United Nations: 2-Ethyl hexyl phosphoric acid ester and bis(2-ethylhexyl) phosphate are not listed on the Yellow List - List of Narcotic Drugs under International Control, the Green List - List of Psychotropic Substances under International Control, nor 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: 2-Ethyl hexyl phosphoric acid ester and bis(2-ethylhexyl) phosphate belong to a
family of alkyl phosphates (organophosphates) and are alkyl esters of phosphoric acid\(^1\). These substances have widespread application in the manufacture of paints and pigments\(^2\). While phosphoric acid was included under Item 22 of Part 1 of Schedule VI to the CDSA, on the basis that phosphoric acid is a derivative of hypophosphorous acid, these substances are not considered to be derivatives of hypophosphorous acid and therefore should not be included under Item 22 of Part 1 of Schedule VI to the CDSA.

Recommendation: 2-Ethyl hexyl phosphoric acid ester and bis(2-ethylhexyl) phosphate are not included in the schedules to the CDSA and are not considered to be controlled substances.

April 27, 2010.

\(^{1}\)http://www.epa.gov/hpv/pubs/summaries/phsacdde/c13356rt2.pdf

\(^{2}\)http://apps.kemi.se/flodessok/floden/_flodenbild/floden.cfm?lang=eng&Id=582