Drug Status Report

Drug: CADOX M-30A VR

Drug Name Status: CADOX M-30A VR is the trade name.

CADOX — 30A VR is an industrial curing agent consisting of the following substances:

I.	17-22 % w/w	Methyl ethyl ketone peroxide
II.	0.1-1.5 % w/w	Hydrogen peroxide
III.	73-83 % w/w	2,2,2-Trimethyl-1,3-pentanediol diisobutanoate
IV.	0.1-1.5 % w/w	Water
V.	1-2 % w/w	Methyl ethyl ketone

Chemical Names:

- I. 2-Butanone peroxide
- II. Hydrogen peroxide
- III. 1-Isopropyl-2,2-dimethyltrimethylene diisobutyrate

Other Names:

- I. Methyl ethyl ketone hydroperoxide; ketonox
- II. Hydrogen dioxide
- III. Isobutyric acid, 1-isopropyl-2,2-dimethyltrimethylene ester; propanoic acid, 2-methyl-1,1'-(2,2-dimethyl-1-(1-methylethyl)-1,3-propanediyl)ester

Chemical Structure



Molecular Formula: $C_8H_{18}O_6$; $H_2 O_2$; $C_{16}H_{30}O_4$

Pharmacological class / Application: fine chemicals; organic peroxide

Canadian Status:

Methyl ethyl ketone peroxide is an industrial catalyst and is used as an accelerator in the manufacture of resins such as polyester and silicone. It is not similar to any of the substances

listed in the Schedules to the CDSA.

Hydrogen peroxide is a powerful oxidising agent and has a variety of applications including its use as a bleaching agent, disinfectant, and a propellant in rocket fuels. The substance is not similar to any of the substances listed in the Schedules to the CDSA.

1-Isopropyl-2,2-dimethyltrimethylene diisobutyrate is used in the manufacture of polymers and plastics used in food packaging¹ and is not similar to any of the substances listed in the Schedules to the CDSA.

Methyl ethyl ketone is listed Part 2 of Schedule VI to the CDSA and is a Class B precursor.

Recommendation: CADOX M-30A VR contains 1-2% methyl ethyl ketone, which is controlled as a Class B precursor. Therefore, CADOX M-30A VR is considered to be controlled and subject to the *Precursor Control Regulations*.

June 18, 2010

¹Astill, BD. *et al.* (1972) The toxicology and fate of 2,24-trimethyl-1,3-pentanediol diisobutyrate, Toxicol. Applied Pharmacol. **22**:387-399.