Drug Status Report

Drug: 5-(1,1-Dimethylhexyl)-2-(3-hydroxycyclohexyl)phenol

Drug Name Status: 5-(1,1-Dimethylhexyl)-2-(3-hydroxycyclohexyl)phenol is the chemical name.

Chemical Name: 5-(1,1-Dimethylhexyl)-2-(3-hydroxycyclohexyl)phenol

Chemical structure:

Molecular Formula: C₂₀H₃₂O₂

Pharmacological class / Application: cannabinoid

International status:

US: The substance is not currently listed on the schedules to the US Controlled Substances Act.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International Control.

Canadian Status: 5-(1,1-Dimethylhexyl)-2-(3-hydroxycyclohexyl)phenol is a synthetic substance that has been assessed¹ in four cannabinoid behavioural evaluations and found to be similar in activity to delta9-tetrahydrocannabinol (THC). In another study², 5-(1,1-Dimethylhexyl)-2-(3-hydroxycyclohexyl)phenol was shown to exhibit cannabinoid receptor binding activity and analgesic activity characteristic of the cannabinoids. Status decisions have been made on several other synthetic cannabinoid receptor agonists and antagonists. See decisions for anandamide; methanandamide; WIN 555212; JWH 015; O-2050, CP55940, AM630, AM251 and SR 141716A. Cannabinoid receptor agonists have been declared to be included within item 1 of

¹ Compton DR, Johnson MR, Melvin LS, Martin BR., Pharmacological profile of a series of bicyclic cannabinoid analogs: classification as cannabimimetic agents. J Pharmacol Exp Ther. 1992 Jan;260(1):201-9.

² Melvin LS, Milne GM, Johnson MR, Subramaniam B, Wilken GH, Howlett AC, Mol Pharmacol. 1993 Nov;44(5):1008-15.

Schedule II to the CDSA by virtue of being "similar synthetic preparations." Cannabinoid receptor antagonists have been declared to fall outside item 1 of Schedule II to the CDSA. 5-(1,1-Dimethyloctyl)-2-(3-hydroxycyclohexyl)phenol is a synthetic preparation similar to the cannabinoids and therefore included in item 1 of Schedule II.

Recommendation: 5-(1,1-Dimethylhexyl)-2-(3-hydroxycyclohexyl)phenol is included in item 1 of Schedule II to the CDSA and is a controlled substance.

October 7, 2009