

# synthetic cannabinoids

## what are cannabinoids and synthetic cannabinoids?

‘Cannabinoids’ are chemicals found in cannabis that are unique to the plant. The most well known and researched of these, delta-9-tetrahydrocannabinol ( $\Delta$ 9-THC), is the substance primarily responsible for the psychoactive effects of cannabis. The effects of the cannabinoids reflect the areas of the brain they interact with.

‘Synthetic cannabinoids’ are functionally similar to THC. Like THC, they bind to the same cannabinoid receptors in the brain and other organs. In recent years, a wide variety of synthetic cannabinoid products have been made available as smoking mixtures that are sold on the Internet and in various specialised shops in some parts of the world. These products are usually sold in foil sachets, typically containing 1-3 g of dried plant matter to which one or more of the cannabinoids have been added. It is believed that a solution of the cannabinoids is sprayed onto the herbal mixture. A number of plant-based ingredients are often listed on the packaging, but scientific testing has found that many of these are not actually present.

In Europe, a range of products known as ‘Spice’ have been produced and sold as a legal herb-based alternative to cannabis, e.g. Spice Silver and Spice Diamond. Since the Spice brand first appeared in 2004, a large number of competing products made by other manufacturers have also become available.

In Australia, synthetic cannabinoid products (often referred to as ‘synthetic cannabis’) have recently become available. As in other parts of the world, they are usually sold through the Internet, as well as specialist adult stores or tobacconists. ‘Kronic’ is perhaps the best known of these and has received a great deal of media attention in recent times. Other such products available in Australia that contain synthetic cannabinoids include Kalma, Voodoo, Kaos and Mango Kush.

## are synthetic cannabinoids safe?

Synthetic cannabinoids are often classified as ‘research chemicals.’ Research chemicals are experimental chemicals that are not approved for human consumption. The vast majority of these chemicals have only been recently synthesized and little, if any, data exists currently about their side effects, adverse reactions, long-term damage, or dependence potential. Most importantly, there are no officially published safety data and almost nothing is known about their effects on humans.

Based on the information available, it can be assumed that different amounts or combinations of synthetic cannabinoids are added to the range of products currently available. This is done to produce the cannabis-like subjective effects that potential users are seeking. Media stories from Europe suggest that some of the synthetic cannabinoid products currently available have been produced in Asia (e.g. China), but it remains unclear where and how the actual production of the herbal mixtures, the synthetic cannabinoids and their addition to the herbal mixtures takes place.

## what are the laws about synthetic cannabinoids in Australia?

Commonwealth, state and territory authorities have become increasingly concerned about such products. The Commonwealth, in considering prohibitions on synthetic cannabinoid analogues, recently classified eight synthetic cannabis-like substances as prohibited substances throughout Australia. These restrictions, effective from 8 July 2011, still allow access to these substances for use in strictly-controlled medical and clinical studies to allow for appropriate investigation of any potential future therapeutic uses.

It is important to note that enforcement of Commonwealth scheduling decisions are implemented within the states and territories under local drugs and poisons legislation. Commonwealth controls are automatically adopted through reference in Victoria, the Northern Territory and the Australian Capital Territory.

Ahead of the Commonwealth's decision on national scheduling of synthetic cannabinoid analogues, several states have taken action to place bans on the possession and sale of products containing these substances within their own jurisdictions.

On 16 June 2011, the Queensland Government announced that it was moving to ban synthetic cannabinoids under the (Qld) Drugs Misuse Act. Fifteen emerging drugs will be captured under this change.

On 17 June 2011, Western Australia listed seven synthetic cannabinoids as banned substances under the (WA) Poisons Act. WA will subsequently complement this action by making changes to the (WA) Misuse of Drugs Act. South Australia similarly implemented controls on 17 substances on the same day.

On 29 June 2011, Victoria announced the introduction of new regulations to allow quick action to ban emerging drugs, including Kronic.

The NSW Government banned the sale of synthetic cannabinoids on 1 July 2011, and the possession of these products were made illegal on 8 July.

Tasmania is also considering appropriate controls under its own legislation.

In addition to the consideration of domestic controls within each state and territory, the Commonwealth is pursuing broader regulatory options in relation to controlling existing and emerging synthetic analogue drugs.

It is important to remember that in addition to the possible legal consequences of using these products, we know little about their ingredients and as a result the possible health consequences of using them via any route of administration are as yet unknown.

For more information please see the factsheet '[Spice.](#)'