



## K2/Spice

### WHAT IS K2?

K2 and Spice are just two of the many trade names or brands for synthetic designer drugs that are intended to mimic THC, the main psychoactive ingredient of marijuana. These designer synthetic drugs are from the synthetic cannabinoid class of drugs that are often marketed and sold under the guise of “herbal incense” or “potpourri.”

Synthetic cannabinoids are not organic, but are chemical compounds created in a laboratory. Since 2009, law enforcement has encountered hundreds of different synthetic cannabinoids that are being sold as “legal” alternatives to marijuana. These products are being abused for their psychoactive properties and are packaged without information as to their health and safety risks.

Synthetic cannabinoids are sold at small convenience stores, head shops, gas stations, and via the Internet from both domestic and international sources. These products are labeled “not for human consumption” in an attempt to shield the manufacturers, distributors, and retail sellers from criminal prosecution. This type of marketing is nothing more than a means to make dangerous, psychoactive substances widely available to the public.

### WHAT IS ITS ORIGIN?

The vast majority of synthetic cannabinoids are manufactured in Asia without manufacturing requirements or quality control standards. The bulk powdered chemical is smuggled into the United States typically as misbranded imports and have no legitimate medical or industrial use.

### What are common street names?

There are numerous street names of synthetic cannabinoids as drug manufacturers try to appeal to and entice youth and young adults by labeling these



*K2/Spice*

products with exotic and extravagant packaging. Some of the many street names of K2/Spice synthetic marijuana are:

- “Spice, K2, Blaze, RedX Dawn, Paradise, Demon, Black Magic, Spike, Mr. Nice Guy, Ninja, Zohai, Dream, Genie, Sence, Smoke, Skunk, Serenity, Yucatan, Fire, Skooby Snax, and Crazy Clown.

### What does it look like?

These chemical compounds are generally found in bulk powder form, and then dissolved in solvents, such as acetone, before being applied to dry plant material to make the “herbal incense” products. After local distributors apply the drug to the dry plant material, they package it for retail distribution. As these products have no accepted medical use, this process is done without pharmaceutical-grade chemical purity standards, or any concern for the user. It ignores any control mechanisms that would serve to ensure a uniform concentration of the powerful and dangerous drugs contained in each package. The disregard for the public’s safety and often encountered “hot spots” in the drug packaging can result in a user ingesting a highly concentrated portion of the drugs without their knowledge, often leading to serious adverse health effects. The bulk powder can also be dissolved in solution intended to be used in e-cigarette or other vaping devices.

## How is it abused?

Spraying or mixing the synthetic cannabinoids on plant material provides a vehicle for the most common route of administration - smoking (using a pipe, a water pipe, or rolling the drug-laced plant material in cigarette papers). In addition to the cannabinoids laced on plant material and sold as potpourri and incense, liquid cannabinoids have been designed to be vaporized through both disposable and reusable electronic cigarettes.

## What are its overdose effects?

Severe adverse effects have been attributed to the abuse of synthetic cannabinoids, including nausea, vomiting, agitation, anxiety, seizures, stroke, coma, and death by heart attack or organ failure. Acute kidney injury requiring hospitalization and dialysis in several patients reportedly having smoked synthetic cannabinoids has also been reported by the Centers for Disease Control and Prevention.

## Which drugs cause similar effects?

Synthetic cannabinoids are marketed as an alternative to THC, the main psychoactive constituent of marijuana, however they are much more potent and have been shown to cause side effects that are more severe than those reported from THC.

## What is its effect on the mind?

Acute psychotic episodes, dependence, and withdrawal are associated with use of these synthetic cannabinoids. Some individuals have suffered from intense hallucinations. Other effects include severe agitation, disorganized thoughts, paranoid delusions, and violence after smoking products laced with these substances.

## What is its effect on the body?

State public health and poison centers have issued warnings in response to adverse health effects associated with abuse of herbal incense products containing these synthetic cannabinoids. These adverse effects included tachycardia (elevated heart rate), elevated blood pressure, unconsciousness, tremors, seizures, vomiting, hallucinations, agitation, anxiety, pallor, numbness, and tingling. This is in addition to the numerous public health and poison centers which have similarly issued warnings regarding the abuse of these synthetic cannabinoids. In some instances, the adverse health effects can be long-lasting even after the user quits using the substances.

## What is its legal status in the United States?

These substances have no accepted medical use in the United States and have been reported to produce adverse health effects. Currently, 43 substances are specifically listed as Schedule I substances under the Controlled Substances Act either through legislation or regulatory action. In addition there are many other synthetic cannabinoids that meet the definition for "cannabimimetic agent" under the Controlled Substances Act and thus are Schedule I substances.

There are many synthetic cannabinoid substances that are being sold as "incense," "potpourri," and other products that are not controlled substances. However, synthetic cannabinoids may be subject to prosecution under the Controlled Substance Analogue Enforcement Act which allows non-controlled drugs to be treated as Schedule I controlled substances if certain criteria can be met. The DEA has successfully investigated and prosecuted individuals trafficking and selling these dangerous substances using the Controlled Substance Analogue Enforcement Act.