



**Objective:** The goal of this, and subsequent bulletins, is to provide information regarding identified changes in drug trends, and/or to educate and forewarn about newly identified substances.

**Subject Matter:** This release provides information regarding the reemergence of the synthetic cannabinoid compound 5-Fluoro-ADB, which is available through illicit online sources and some local dealers. Due to its resurgence, this information is presented to provide guidance on understanding what 5-Fluoro-ADB is, and its potential threat to public health and safety.

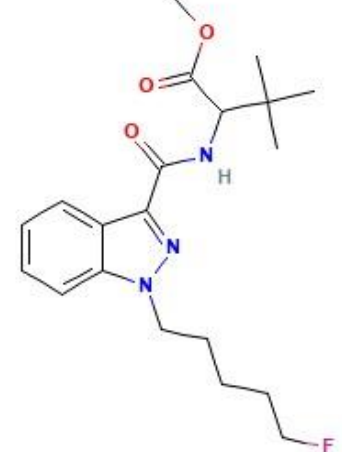
### What is 5-Fluoro-ADB?

5-Fluoro-ADB (5F-ADB / 5F-MDMB-PINACA) is a synthetic cannabinoid that acts as a full agonist<sup>(a)</sup> at cannabinoid receptors, unlike tetrahydrocannabinol (THC), making it almost 290 times more potent than THC.<sup>[1]</sup> This exceptionally high potency contributes to its classification as one of the most dangerous synthetic cannabinoids currently available.<sup>[1]</sup>

First reported by the United States Drug Enforcement Administration (DEA) in 2014, 5F-ADB has since been linked to severe health consequences across multiple countries.<sup>[1]</sup> 5F-ADB has caused alarming cases of intoxication characterized by psychomotor agitation (severe restlessness), confusion, anxiety, and psychosis.<sup>[2]</sup>

As 5F-ADB produces effects significantly more dangerous than natural cannabis, overdoses and chronic use can lead to altered mental status, tachycardia (elevated heart rate), loss of consciousness, and even death.<sup>[3]</sup> Due to these serious public health threats, 5F-ADB was classified as a Schedule I substance in the United States in 2017. As a Schedule I substance 5F-ADB has no accepted medical use and has a high potential for abuse.<sup>[4]</sup>

Source: PubChem



### 5F-ADB's Availability in United States

Although classified as a Schedule I controlled substance in the United States, monitoring data from law enforcement and forensic labs indicates recurring instances of 5F-ADB-containing products in illegal U.S. markets.<sup>[2]</sup> Standard internet searches reveal specialized vendors marketing 5F-ADB and similar synthetic cannabinoids as bulk powder through "research chemical" or "herbal incense/c-liquid" websites, typically featuring warnings such as "not intended for human consumption" or "research purposes only."<sup>[5]</sup>

The vendors' customers then apply 5F-ADB onto organic material, which are deceptively marketed and distributed through convenience stores, gas stations, and smoke shops under names like "Spice," "K2," "potpourri," "herbal incense," "synthetic marijuana," or even as tainted CBD items, with packaging suggesting non-consumption uses.<sup>[2][3]</sup>



Source: k2Liquid

(a) "a substance which initiates a physiological response when combined with a receptor."

## 5-FLUORO-ADB

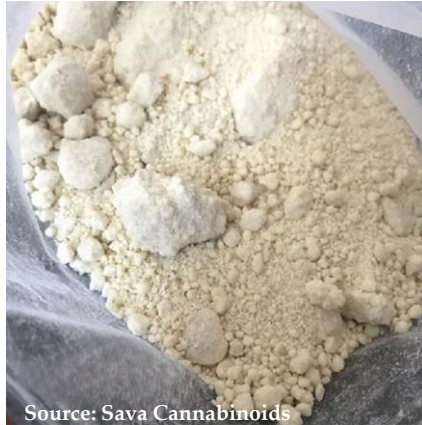


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## Bulk Quantity Examples of 5F-ADB



Source: K2 Liquid



Source: Sava Cannabinoids



Source: MedHigh Supply

Typical Methods to Acquire and Sell Synthetic Cannabinoids / 5F-ADB

Because it is explicitly controlled, 5F-ADB is not obtainable through legitimate U.S. pharmacies, supplement stores, or law-abiding retailers; overt retail availability is almost certainly illegal and subject to seizure and prosecution. Therefore, most synthetic cannabinoids are sold through a mix of open "surface web" shops, social media and messaging apps, convenience stores and head shops, and fully illicit darknet markets, rather than one single type of marketplace. [5]

The same channels are used globally, with brands often marketed as "herbal incense," or "legal highs," and frequently mislabeled regarding contents and legality. A 2022–2023 internet survey identified 62 surface-web shops selling synthetic-cannabinoid vaping products, most claiming to be based in the U.S. and many offering discreet packaging, bulk discounts, and worldwide shipping. [5]

Products are rarely transparent about their exact compounds. In one survey of synthetic cannabinoid vaping products, of the 1,225 listings, fewer than 5% named a specific synthetic cannabinoid, which adds substantial risk for buyers and complicates regulation. Even where such retail sales have been curtailed by law, packaging and branding practices from this setting are often mirrored by online vendors to present an appearance of legitimacy. [5]

Observed Symptoms in 5F-ADB Intoxication Cases

Clinical evidence reveals distinct symptom patterns in 5F-ADB intoxication cases, with severity far exceeding that of natural cannabis. Toxicology and public-health alerts associate 5F-ADB with severe adverse effects (agitation, psychosis, seizures, cardiovascular problems) and multiple deaths, and there are no approved medical or "safe" uses. [2][6] Because products are unregulated and often mislabeled, buyers usually cannot know the dose or even the exact compound they are receiving, which substantially increases overdose and poisoning risk compared with "regulated" cannabis products. [5]

Organic Material Treated With Synthetic Cannabinoid

Source: Alcohol and Drug Foundation

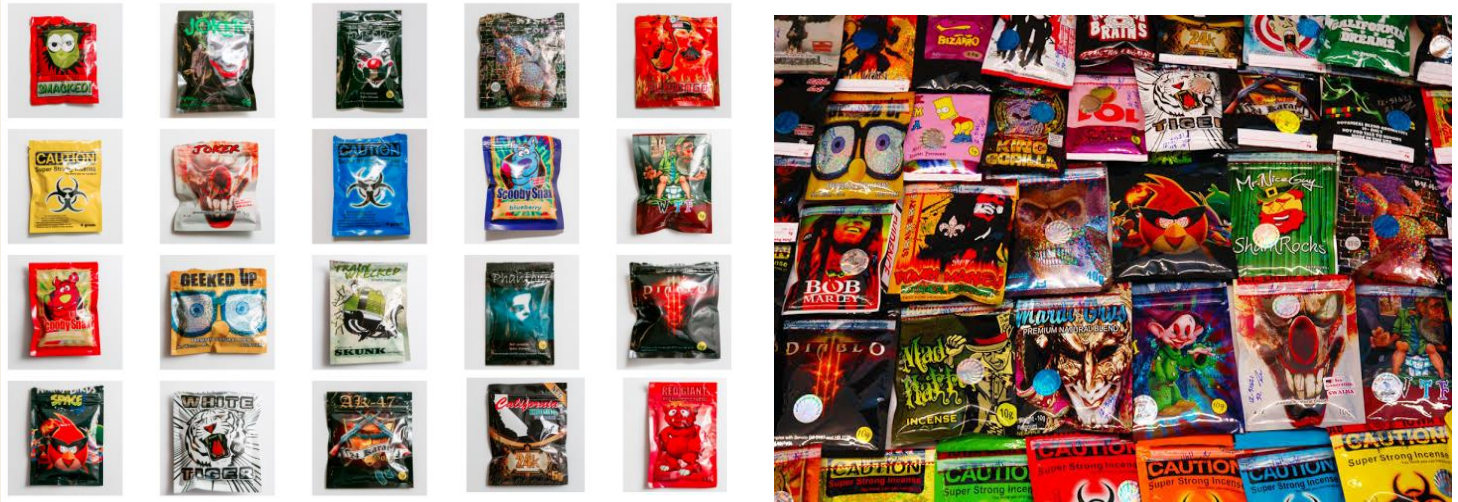


### Psychomotor Agitation and Hallucinations in Adolescents

Adolescents represent a particularly vulnerable population for 5F-ADB exposure. In a documented case, three 17-year-old males required emergency department treatment after smoking what they believed was "Spice." These adolescents exhibited severe psychomotor agitation, confusion, anxiety, and psychosis. Particularly alarming, these young patients believed they were "possessed and had superpowers." Additionally, tachycardia was consistently documented in their cases. [7]

A comparative analysis revealed that teens exposed to synthetic cannabinoids experienced seizures at substantially higher rates (19%) than those using natural cannabis (6%). [8] Moreover, approximately "28% of synthetic cannabinoid users experienced central nervous system depression or coma," compared to only 10% of cannabis users. [8] The neurological impact appears especially pronounced in adolescent patients, who typically require higher acuity care than adults. [8]

### Examples of Synthetic Cannabinoid Packaging



Source: NY State Office of Addiction Services & Support

Source: National Test Systems

### Reported 5F-ADB Seizures and Public Health Alerts

Most of the recent publicly reported 5F-ADB detections and seizures are concentrated in Europe, as reported by European Union early warning systems and United Kingdom border/prison data, and from scattered law-enforcement reports from U.S. states, rather than one single identifiable hotspot. [9] Seized paraphernalia often reveals critical information about synthetic cannabinoid distribution. Products carrying street names like "King Kong," "Great Ape," "Death Grip," and "White Tiger" have historically been linked to 5F-ADB cases. [10] Anecdotally, these substances have been packaged as individual joints, small unlabeled baggies, or packaged in brightly colored packaging, often with caricatures meant to draw the attention of consumers, priced at \$5 to \$20.

### United States

Historical DEA data indicated 5F-ADB was the most identified synthetic cannabinoid in DEA seizures in 2018 [11], and it has also been detected in adulterated CBD products from a U.S. manufacturer. A DEA analysis of drug availability in Pennsylvania (2017–2019) listed 5F-ADB among the few cathinone/cannabinoid substances prominent enough to appear in top forensic reports, indicating documented seizures in that state during that period. [12]



### Nebraska (Omaha/Lincoln)

In December 2025, the Omaha Police Department (PD) publicly warned about 5F-ADB. This occurred after local law enforcement recovered product at the scene of an overdose death investigation, and the subsequent laboratory analysis of the material confirmed the presence of 5F-ADB. <sup>[13]</sup>

The Omaha PD also pointed out that since 5F-ADB is not an opioid, the commonly used opioid antagonist Narcan, is ineffective to counter an overdose involving 5F-ADB. <sup>[13]</sup> The Lincoln PD echoed the warning issued by Omaha PD, though they stated they had no known overdoses involving 5F-ADB at the time, but would remain vigilant. <sup>[14]</sup>

### Conclusion

The evidence surrounding 5F-ADB paints a disturbing picture of a dangerous synthetic cannabinoid. Undoubtedly, its classification as a Schedule I controlled substance reflects the threat it poses to public safety. This compound demonstrates approximately 300 times the potency of THC while producing drastically more harmful effects, including psychosis, memory impairment, respiratory depression, and death. <sup>[1][3]</sup>

Expanded toxicology capabilities, enhanced monitoring of product distribution networks, and thorough testing of paraphernalia could significantly improve detection rates. Though marketed under innocuous names like "Spice" or "K2," these products contain nothing resembling natural cannabis but rather dangerous laboratory-created chemicals. <sup>[3]</sup>

### Key Takeaways

- 5F-ADB is a synthetic cannabinoid is 300x more potent than THC and causes severe symptoms including psychosis, memory loss, and cardiopulmonary arrest. <sup>[1][3]</sup>
- Symptoms are severe and distinctive: Users experience profound memory impairment, seizures accompanied by rigidity of the body, hallucinations, and belief in supernatural powers, with fatal doses dangerously close to impairing doses. <sup>[1][7]</sup>
- Law enforcement faces major challenges, as traditional field sobriety tests fail to detect impairment, and paraphernalia testing becomes crucial since the compound metabolizes rapidly in the body. <sup>[3]</sup>
- The public health threat appears to be escalating. Marketed as "Spice," "herbal incense," or "K2," 5F-ADB has caused fatalities, incentivizing expanded toxicology screening protocols. <sup>[3]</sup>

The narrow margin between impairment and death, combined with detection challenges, makes 5F-ADB one of the most dangerous synthetic drugs currently circulating, encouraging additional scrutiny from both law enforcement and healthcare professionals.

### Recovered 5F-ADB Treated Product



Source: Omaha PD



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