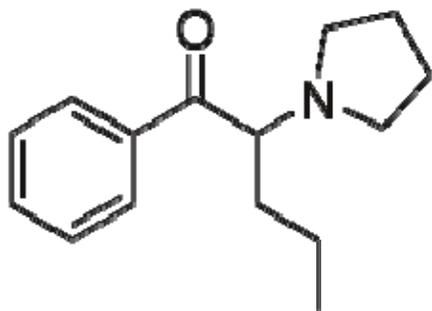


# *alpha*-Pyrrolidinopentiophenone

From Wikipedia, the free encyclopedia

This article is about the drug substance alpha-PVP, also known as flakka or bathsalts. It is a very dangerous “street drug”.



*alpha*-Pyrrolidinopentiophenone

***α*-Pyrrolidinopentiophenone** (also known as *alpha*-pyrrolidinovalerophenone, ***α*-PVP**, **alpha-PVP**, **O-2387**, **β-keto-prolintane**, **Prolintanone**, or **Desmethyl Pyrovalerone**) is a synthetic stimulant drug of the cathinone class developed in the 1960s. Colloquially it is sometimes called **flakka** or **gravel**. *α*-PVP is chemically related to pyrovalerone and is the ketone analog of prolintane.<sup>[1]</sup> It is used as a recreational drug,<sup>[2]</sup> and is considered a Schedule I drug under the Food and Drug Administration Safety and Innovation Act.<sup>[3]</sup>

## Adverse effects

*α*-PVP can cause a condition called "excited delirium" that **involves hyperstimulation, paranoia, and hallucinations**.<sup>[4]</sup> *α*-PVP has been reported to be the cause, or a significant contributory cause, of **death in suicides and overdoses** caused by combinations of drugs.<sup>[5][6][7]</sup> *α*-PVP has also been linked to at least one death where it was combined with pentedrone and caused heart failure.<sup>[8]</sup>

## Pharmacology

The mechanism of action is unknown for *α*-PVP. It is believed to act similarly to the designer drug MDPV, which **acts as a norepinephrine-dopamine reuptake inhibitor** (NDRI),<sup>[9]</sup> although no substantial research on this compound has been conducted.

# Physical and chemical properties

## Detection in body fluids

$\alpha$ -PVP may be quantified in blood, plasma or urine by liquid chromatography-mass spectrometry to confirm a diagnosis of poisoning in hospitalized patients or to provide evidence in a medicolegal death investigation. Blood or plasma  $\alpha$ -PVP concentrations are expected to be in a range of 10–50  $\mu\text{g/L}$  in persons using the drug recreationally, >100  $\mu\text{g/L}$  in intoxicated patients and >300  $\mu\text{g/L}$  in victims of acute overdose.<sup>[10][11]</sup>

## Chemistry

$\alpha$ -PVP gives no reaction with the marquis reagent. It gives a grey/black reaction with the mecke reagent.<sup>[12]</sup>

## Society and culture

### Legal status

$\alpha$ -PVP is a Schedule I drug in New Mexico, Delaware, Florida, Oklahoma, and Virginia. On January 28, 2014, the U.S. DEA listed it, along with nine other synthetic cathinones, on the Schedule 1 with a temporary ban, effective February 27, 2014.<sup>[13]</sup> The drug was explicitly made illegal in New South Wales after it was illegally marketed with the imprimatur of erroneous legal advice that it was not encompassed by analog provisions of the relevant act. It is encompassed by those provisions, and therefore has been illegal for many years in New South Wales. The legislative action followed the death of two individuals from using it; one jumping off a balcony, another having a heart attack after a state of delirium.<sup>[14][15]</sup>

As of October 2015  $\alpha$ -PVP is a controlled substance in China.<sup>[16]</sup>

### Economics

$\alpha$ -PVP is sometimes the active ingredient in **recreational drugs sold as "bath salts"**.<sup>[14]</sup> It may also be distinguished from "bath salts" and sold under a different name: "flakka", a name used in Florida, or "gravel" in other parts of the U.S. It is **typically manufactured in China, India, or Pakistan and repackaged in gram packets in the U.S., and it is possible to mix it with higher-priced drugs such as heroin, cocaine, or methamphetamine**. It is reportedly available as cheaply as US\$5 per dose.<sup>[17]</sup> A laboratory for one county in Florida reported a steady rise in  $\alpha$ -PVP detections in seized drugs from none in January–February 2014 to 84 in September 2014.<sup>[18]</sup>