

## FLUALPRAZOLAM (Street Name: Flualp)

### Introduction:

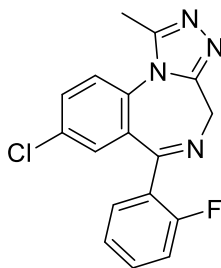
Flualprazolam is a triazolobenzodiazepine, which is chemically related to a class of drugs known as benzodiazepines. Benzodiazepines produce central nervous system (CNS) depression and are commonly used to treat panic disorders, insomnia, and anxiety. Flualprazolam is generally encountered in pill form.

### Licit Uses:

Benzodiazepines are widely prescribed drugs; however, flualprazolam does not currently have an accepted medical use in the United States.

### Chemistry:

Flualprazolam (chemically known as 8-chloro-6-(2-fluorophenyl)-1-methyl-4*H*-benzo[*f*][1,2,4]triazolo[4,3-*a*][1,4]diazepine; CAS 28910-91-0) is a triazolobenzodiazepine and is structurally similar to alprazolam and other schedule IV benzodiazepines. Flualprazolam is composed of a benzene ring fused to a seven-membered 1,4-diazepine ring and also contains a fused triazolo ring. A methyl (–CH<sub>3</sub>) group is attached at the 1-position, a 2-fluorophenyl ring is attached at the 6-position, and a chlorine is attached at the 8-position of the triazolobenzodiazepine structure. The structure of flualprazolam is shown below:



### Pharmacology:

Flualprazolam, like other benzodiazepines, produces CNS depressant effects by binding to the gamma-aminobutyric (GABA) receptors. Flualprazolam has a greater binding affinity to these receptors relative to diazepam (a GABA receptor agonist) and flumazenil (a nonspecific GABA receptor antagonist). Additionally, in drug discrimination studies, flualprazolam fully substituted for the discriminative stimulus effects of midazolam. Clinical studies have not been conducted on the effects of flualprazolam in humans; however, published reports indicate that the recreational use of flualprazolam has led to sedative-hypnotic effects, physical impairment, and death. Flualprazolam is reported to have an onset of action of 10–30 minutes, as well as a long duration of action (6–14 hours).

### Illicit Uses:

Flualprazolam is generally abused for its sedative-hypnotic effects. Reports from online drug user forums describe this substance as being similar to clonazepam and alprazolam.

Recently, the Centers for Disease Control and Prevention released “The Fentanyl Study”, which utilizes data collected from 10 geographically diverse hospitals in 9 states across the United States. As of December 2024, the study tested 1,476 samples between February 2020 and August 2024; of these, 8% of blood specimens from suspected opioid-involved overdoses tested positive for illicit benzodiazepines.

Toxicological data indicate that flualprazolam is a public health concern. DEA’s Toxicology Testing Program (DEA TOX) is a surveillance program that aims to detect novel psychoactive substances (NPS) within the United States. DEA TOX has detected flualprazolam in 24 cases since the program began in 2019. Additionally, the United Nations Office on Drugs and Crime (UNODC) Early Warning Advisory on NPS Toxicology Portal (Tox-Portal)—an online tool to collect toxicological and harm data associated with NPS use—has published biannual reports (Current NPS Threats) to identify most harmful NPS since 2019. In 2023, flualprazolam was the second most common benzodiazepine-type NPS reported in postmortem (n = 20) and driving under the influence of drugs (DUID; n=39) cases. In 2024, UNODC reported that benzodiazepine-type NPS continued to constitute the greatest number of NPS reported to the Tox-Portal across postmortem, DUID (68%), and clinical admission (56%) cases.

### User Population:

Flualprazolam is used as a recreational substance in the United States. Of cases voluntarily submitted for analysis through DEA TOX, users exposed to flualprazolam included both males and females and range from ages 16–70.

### Illicit Distribution

Flualprazolam can be purchased via the internet as a research chemical. This substance is generally encountered in pill form, and its external markings have been found to mimic that of Xanax® and Klonopin®.

DEA’s National Forensic Laboratory Information System (NFLIS) Drug database collects scientifically verified data on drug items and cases submitted to and analyzed by participating federal, state, and local forensic drug laboratories. NFLIS-Drug has received over 10,500 reports of flualprazolam since its initial report in 2004. It peaked in 2020 with 4,821 reports and decreased to only 71 identifications in 2025 (reports to NFLIS-Drug are still pending for 2025 and 2026).

### Control Status:

Flualprazolam is controlled in schedule I of the Controlled Substances Act.

Comments and additional information are welcomed by the Drug and Chemical Evaluation Section; Fax 571-362-4250, Telephone 571-362-3249, or Email [DPE@dea.gov](mailto:DPE@dea.gov).