

## FLUALPRAZOLAM (Street Name: Flualp)

### Introduction:

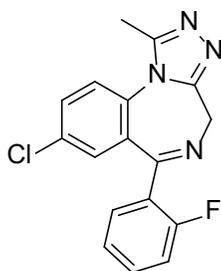
Flualprazolam is structurally related to the triazolobenzodiazepine, alprazolam. As a class of drugs, benzodiazepines produce central nervous system (CNS) depression and are commonly used to treat, panic disorders, anxiety, and insomnia. The United States Food and Drug Administration has not approved flualprazolam for therapeutic use.

### Licit Uses:

Flualprazolam does not currently have an accepted medical use in the United States.

### Chemistry:

Flualprazolam (8-chloro-6-(2-fluorophenyl)-1-methyl-4H-[1,2,4]triazolo[4,3-a][1,4]benzodiazepine) is a triazolobenzodiazepine and is structurally similar to alprazolam. Flualprazolam is composed of a benzene ring fused to a seven-membered 1,4-diazepine ring. Flualprazolam 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. Flualprazolam has a molecular formula of C<sub>17</sub>H<sub>12</sub>ClFN<sub>4</sub> and a molecular weight of 326.76 g/mol. The structure of flualprazolam is shown below:



### Pharmacology:

There is limited information regarding the pharmacology of flualprazolam in published literatures. Flualprazolam shares structural similarities with alprazolam and other Schedule IV benzodiazepines. Thus, it is likely to bind to benzodiazepine receptor sites and produce central nervous system depressant effects similar to that of alprazolam and other Schedule IV benzodiazepines. Although there are no studies regarding the effects of flualprazolam in humans, anecdotal online reports describe sedation and physical impairment following oral ingestion, which suggests, flualprazolam possesses central nervous system depressant effects similar to other known Schedule IV benzodiazepines. Recreational use of flualprazolam may result in prolonged, severe sedation

associated with coma. The onset of action of flualprazolam following oral administration is reported to be 10-30 minutes. Flualprazolam has a long duration of action (6-14 hour) compared to the relatively short acting alprazolam.

According to the United Nations Office on Drugs and Crime (UNODC) Early Warning Advisory on NPS Toxicology Portal (Tox-Portal), an online tool utilized to collect toxicological data and harm associated with the use of novel psychoactive substances, 42 cases involving flualprazolam were reported in 2019. Of the 42 cases reported to UNODC, 40 cases originated from the United States. In five of these U.S. cases, flualprazolam was determined to be causal to the event that precipitated reporting.

### Illicit Uses:

Flualprazolam is generally abused for its sedative/hypnotic effects. Reports from online drug user forums describe it to be similar to clonazepam and alprazolam.

### User Population:

Flualprazolam is used as a recreational substance in the United States. It is generally abused by young adults, especially males.

### Illicit Distribution:

Flualprazolam can be purchased via the internet as a research chemical. It is generally encountered in pill form and the external markings have been found to mimic that of Zanax and Klonopin. The National Forensic Laboratory Information System (NFLIS) is a DEA database that collects scientifically verified data on drug items and cases submitted to and analyzed by state, local, and federal forensic laboratories. According to NFLIS, the number of flualprazolam drug reports increased from one in 2017 to 112 in 2018 and, has continued to increase preliminarily to 1,624 in 2019.

The National Poison Data System (NPDS) of the American Association of Poison Control Centers (AAPCC) utilized by members of the public and health care providers reported no flualprazolam single substance exposures in 2014 and 2015, 2 exposures in 2018 and 11 in 2019. DEA would be appreciative of any toxicology or adverse event reporting connected to flualprazolam.

### Control Status:

Flualprazolam is not currently controlled under the Controlled Substances Act. At the 2020 Commission on Narcotic Drugs Sixty-third session, the Commission decided to include flualprazolam in Schedule IV of the 1971 Convention on Psychotropic Substance.

Comments and additional information are welcomed by the Drug and Chemical Evaluation Section; Fax 571-362-4250, Telephone 571-362-3249, or email: DPE@usdoj.gov.