Clonazepam | apollo | +9191 46 950

Clonazepam | apollo | +9191 46 950

Clonazepam

CAS Number : 1622-61-3
Molecular Weight : 315.71 g/mol
Molecular Formula : $\text{C}_{15}\text{H}_{10}\text{ClN}_{3}\text{O}_{3}$
Systematic (IUPAC) : 5-(2-chlorophenyl)-7-nitro-2,3-dihydro-1H-1,4-benzodiazepin-2-one

DRUG DESCRIPTION
Clonazepam CAS Number 1622-61-3
Clonazepam belongs to a group of drugs called benzodiazepines. Benzodiazepines are sedative-hypnotic drugs that help to relieve nervousness, tension, anxiety symptoms, and seizures by slowing the central nervous system. To do this, they block the effects of a specific chemical involved in the transmission of nerve impulses in the brain, decreasing the excitement level of the nerve cells.

When clonazepam is used to treat panic disorder, it is more sedating than alprazolam, another benzodiazepine drug used to treat panic disorder. However, unlike alprazolam, clonazepam may trigger depressive episodes in patients with a previous history of depression. In people who experience social phobia, treatment with clonazepam reduces the rate of depression. The use of clonazepam for social phobia is considered off-label use—a use that is legal, but not specifically approved by the FDA.

Clonazepam comes in 0.5 mg-, 1 mg-, and 2 mg tablets. Clonazepam comes as a tablet to take by mouth. It usually is taken three times a day and may be taken with or without food. Follow the directions on your prescription label carefully, and ask your doctor or pharmacist to explain any part you do not understand.

Take clonazepam exactly as directed. Clonazepam can be habit-forming. Do not take a larger dose, take it more often, or for a longer time than your doctor tells you to. Tolerance may develop with long-term or excessive use, making the drug less effective. This medication must be taken regularly to be effective. Do not skip doses even if you feel that you do not need them. Do not take clonazepam for more than 4 months or stop taking this medication without talking to your doctor. Stopping the drug suddenly can worsen your
condition and cause withdrawal symptoms (anxiousness, sleeplessness, and irritability). Your doctor probably will decrease your dose gradually. Clonazepam is also used to treat symptoms of Parkinson's disease, twitching, schizophrenia, and for pain management. Talk to your doctor about the possible risks of using this drug for your condition.

**DOSAGE**

Clonazepam CAS Number 1622-61-3

Take clonazepam exactly as it was prescribed for you. Do not take the medication in larger amounts, or take it for longer than recommended by your doctor. Follow the directions on your prescription label. Your doctor may occasionally change your dose to make sure you get the best results from this medication.

Swallow the regular clonazepam tablet whole, with a full glass of water.

To take the clonazepam orally disintegrating tablet (wafer):

*Keep the tablet in its blister pack until you are ready to take the medicine. Open the package and peel back the foil from the tablet blister. Do not push a tablet through the foil or you may damage the tablet.*

*Using dry hands, remove the tablet and place it in your mouth. It will begin to dissolve right away.*

*Do not swallow the tablet whole. Allow it to dissolve in your mouth without chewing.*

*Swallow several times as the tablet dissolves. If desired, you may drink liquid to help swallow the dissolved tablet.*
Clonazepam should be used for only a short time. Do not take this medication for longer than 9 weeks without your doctor's advice.

To be sure this medication is not causing harmful effects, your blood and liver function may need to be tested on a regular basis. Do not miss any scheduled visits to your doctor.

Do not stop using clonazepam or change your dose without first talking to your doctor, even if you feel better. You may have increased seizures if you stop using the medicine suddenly. You will need to use less and less before you stop the medication completely. Your doctor may also prescribe another seizure medication for you to start while you are stopping clonazepam.

Your symptoms may return when you stop using clonazepam after using it over a long period of time. You may have seizures or withdrawal symptoms when you stop using clonazepam. Withdrawal symptoms may include tremor, sweating, trouble sleeping, muscle cramps, stomach pain, vomiting, and unusual thoughts or behavior.

Store clonazepam at room temperature away from moisture, heat, and light. Keep track of how many pills have been used from each new bottle of this medicine. Benzodiazepines are drugs of abuse and you should be aware if any person in the household is using this medicine improperly or without a prescription.

**SIDE EFFECTS**

Clonazepam CAS Number 1622-61-3

Get emergency medical help if you have any of these signs of an allergic reaction: hives; difficulty breathing;
swelling of your face, lips, tongue, or throat. Call your doctor at once if you have any of these serious side effects:
* confusion, hallucinations, unusual thoughts or behavior;
* hyperactivity, agitation, hostility;
* unusual or involuntary eye movements;
  * weak or shallow breathing;
* depressed mood, thoughts of suicide or hurting yourself;
* chest tightness, fast or pounding heartbeats;
* painful or difficult urination, urinating more or less than usual;
  * pale skin, easy bruising or bleeding; or
  * new or worsening seizures.
Less serious clonazepam side effects may include:
* drowsiness, dizziness, spinning sensation;
  * memory problems;
* tired feeling, muscle weakness, lack of balance or coordination;
  * slurred speech;
* drooling or dry mouth, sore gums;
  * runny or stuffy nose;
* loss of appetite, nausea, diarrhea, constipation;
  * blurred vision;
  * headache;
* nervousness, sleep problems (insomnia);
  * skin rash; or
  * weight changes.

**PRECAUTIONS**
Clonazepam CAS Number 1622-61-3
Do not use clonazepam if you have severe liver disease, or if you are allergic to clonazepam or to other benzodiazepines, such as alprazolam (Xanax), chlordiazepoxide (Librium), clorazepate (Tranxene), lorazepam (Ativan), or oxazepam (Serax). Before taking clonazepam, tell your doctor if you are allergic to any drugs, or if you have:

* kidney or liver disease;
* glaucoma;
* asthma, emphysema, bronchitis, chronic obstructive pulmonary disorder (COPD), or other breathing problems;
* a history of depression or suicidal thoughts or behavior;

or

* a history of drug or alcohol addiction.

If you have any of these conditions, you may need a dose adjustment or special tests to safely take this medication.

FDA pregnancy category D. Clonazepam may cause harm to an unborn baby, and may cause breathing or feeding problems in a newborn. But having a seizure during pregnancy could harm both the mother and the baby. Do not start taking clonazepam during pregnancy without telling your doctor you are pregnant.

If you become pregnant while taking this medicine for seizures, do not stop taking clonazepam without your doctor's advice. Seizure control is very important during pregnancy and the benefits of preventing seizures may outweigh any risks posed by taking clonazepam.

Clonazepam may pass into breast milk and could harm a nursing baby. Do not breast-feed a baby while taking this medication. The sedative effects of clonazepam may last longer in older adults. Accidental falls are common in elderly patients who take benzodiazepines. Use
caution to avoid falling or accidental injury while you are taking this medicine. Clonazepam may be habit-forming and should be used only by the person it was prescribed for. Clonazepam should never be shared with another person, especially someone who has a history of drug abuse or addiction. Keep the medication in a secure place where others cannot get to it.

**INTERACTION**

Clonazepam CAS Number 1622-61-3

Clonazepam decreases the levels of carbamazepine and likewise its level is reduced by carbamazepine. Clonazepam may affect levels of phenytoin (diphenylhydantoin) by decreasing, or increasing. In turn, Phenytoin may lower clonazepam plasma levels, by increasing the speed of clonazepam clearance by approximately 50% and decreasing its half life by 31 per cent. Clonazepam increases the levels of primidone, and phenobarbital. Clonazepam, like many other benzodiazepines, may impair one’s ability to drive or operate heavy machinery. The central nervous system depressing effects of the drug can be intensified by alcohol consumption. Benzodiazepines have been shown to cause both psychological and physical dependence. Patients physically dependent on clonazepam should be slowly titrated off under the supervision of a qualified healthcare professional to reduce the intensity of withdrawal or rebound symptoms.

Clonazepam does not appear to alter the pharmacokinetics of phenytoin, carbamazepine or phenobarbital. The effect of clonazepam on the metabolism of other drugs has not been investigated.
Effect of Other Drugs on the Pharmacokinetics of Clonazepam

Literature reports suggest that ranitidine, an agent that decreases stomach acidity, does not greatly alter clonazepam pharmacokinetics.

In a study in which the 2 mg clonazepam orally disintegrating tablet was administered with and without propantheline (an anticholinergic agent with multiple effects on the GI tract) to healthy volunteers, the AUC of clonazepam was 10% lower and the Cmax of clonazepam was 20% lower when the orally disintegrating tablet was given with propantheline compared to when it was given alone.

PHARMACOLOGY

Clonazepam CAS Number 1622-61-3

The precise mechanism by which clonazepam exerts its antiseizure and antipanic effects is unknown, although it is believed to be related to its ability to enhance the activity of gamma aminobutyric acid (GABA), the major inhibitory neurotransmitter in the central nervous system. Convulsions produced in rodents by pentylenetetrazol or, to a lesser extent, electrical stimulation are antagonized, as are convulsions produced by photic stimulation in susceptible baboons. A taming effect in aggressive primates, muscle weakness and hypnosis are also produced. In humans, clonazepam is capable of suppressing the spike and wave discharge in absence seizures (petit mal) and decreasing the frequency, amplitude, duration and spread of discharge in minor motor seizures.

Clonazepam's primary mechanism of action is via modulating GABA function in the brain, via the
benzodiazepine receptor which in turn leads to enhanced GABAergic inhibition of neuronal firing. In addition clonazepam decreases the utilization of 5-HT (serotonin) by neurons and has been shown to bind tightly to central type benzodiazepine receptors. Because of its strong anxiolytic and anticonvulsant properties, it is said to be among the class of "highly potent" benzodiazepines. The anticonvulsant properties of benzodiazepines are due to enhancement of synaptic GABA responses and inhibition of sustained high frequency repetitive firing. Benzodiazepines, including clonazepam, bind to mouse glial cell membranes with high affinity. Clonazepam decreases release of acetylcholine in cat brain and decreases prolactin release. Benzodiazepines inhibit cold-induced thyroid stimulating hormone (also known as TSH or thyrotropin) release. Benzodiazepines acted via micromolar benzodiazepine binding sites as Ca2+ channel blockers and significantly inhibit depolarization-sensitive calcium uptake in experimentation on rat brain cell components.

CONSUMER INFORMATION
Clonazepam CAS Number 1622-61-3
Clonazepam is used to control seizures. It is also used to relieve anxiety.
Clonazepam comes as a tablet to take by mouth. It usually is taken three times a day and may be taken with or without food. Follow the directions on your prescription label carefully, and ask your doctor or pharmacist to explain any part you do not understand. Take clonazepam exactly as directed.
Clonazepam can be habit-forming. Do not take a larger dose, take it more often, or for a longer time than your doctor tells you to. Tolerance may develop with long-term or excessive use, making the drug less effective. This medication must be taken regularly to be effective. Do not skip doses even if you feel that you do not need them. Do not take clonazepam for more than 4 months or stop taking this medication without talking to your doctor. Stopping the drug suddenly can worsen your condition and cause withdrawal symptoms (anxiousness, sleeplessness, and irritability). Your doctor probably will decrease your dose gradually.

Clonazepam is also used to treat symptoms of Parkinson's disease, twitching, schizophrenia, and for pain management. Talk to your doctor about the possible risks of using this drug for your condition.

Before taking clonazepam,
* tell your doctor and pharmacist if you are allergic to clonazepam, alprazolam (Xanax), chlordiazepoxide (Librium, Librax), clorazepate (Tranxene), diazepam (Valium), estazolam (ProSom), flurazepam (Dalmane), lorazepam (Ativan), oxazepam (Serax), prazepam (Centrax), temazepam (Restoril), triazolam (Halcion), or any other drugs.
* tell your doctor and pharmacist what prescription and nonprescription medications you are taking, especially antihistamines; cimetadine (Tagamet); digoxin (Lanoxin); disulfiram (Antabuse); fluoxetine (Prozac); isoniazide (INH, Laniazid, Nydrazid); ketoconazole (Nizoral); levodopa (Larodopa, Sinemet); medications for depression, seizures, pain, Parkinson's disease, asthma, colds, or allergies; metoprolol (Lopressor, Toprol XL), muscle relaxants; oral contraceptives; oral antifungals, phenytoin (Dilantin); probenecid
(Benemid); propoxyphene (Darvon); propranolol (Inderal); rifampin (Rifadin); sedatives; sleeping pills; theophylline (Theo-Dur); tranquilizers; valproic acid (Depakene); and vitamins. These medications may add to the drowsiness caused by clonazepam.

* tell your doctor if you have or have ever had glaucoma; seizures; or lung, heart, or liver disease.
* tell your doctor if you are pregnant, plan to become pregnant, or are breast-feeding. If you become pregnant while taking clonazepam, call your doctor immediately. You should not nurse a baby while taking clonazepam.
* if you are having surgery, including dental surgery, tell the doctor or dentist that you are taking clonazepam.
* you should know that this drug may make you drowsy. Do not drive a car or operate machinery until you know how this drug affects you.
* remember that alcohol can add to the drowsiness caused by this drug. You should avoid drinking alcohol while taking clonazepam.
* tell your doctor if you use tobacco products. Cigarette smoking may decrease the effectiveness of this drug.

Keep this medication in the container it came in, tightly closed, and out of reach of children. Store it at room temperature and away from excess heat and moisture (not in the bathroom). Throw away any medication that is outdated or no longer needed. Talk to your pharmacist about the proper disposal of your medication.

**Type**

small molecule

**Description**
An anticonvulsant used for several types of seizures, including myotonic or atonic seizures, photosensitive epilepsy, and absence seizures, although tolerance may develop. It is seldom effective in generalized tonic-clonic or partial seizures. The mechanism of action appears to involve the enhancement of gamma-aminobutyric acid receptor responses.

**Synonyms**
- Chlonazepam
- Clonazepamum

**Categories**
- Anticonvulsants
- Benzodiazepines
- GABA Modulators

**Taxonomy**

**Kingdom** Organic

**Classes**
- Benzodiazepines
- Lactams'
- Substructures
- Benzodiazepines
- Nitrobenzenes
- Oxoazanuimis
- Amino Ketones
- Benzene and Derivatives
- Aryl Halides
- Carboxylic Acids and Derivatives
- Halobenzenes
- Nitro compounds
**Heterocyclic compounds**

**Aromatic compounds**

**Carboxamides and Derivatives**

**Diazepines**

**Lactams**

**Imines**

**Anilines**

**Pharmacology**

**Indication**
Used as an anticonvulsant in the treatment of the Lennox-Gastaut syndrome (petit mal variant), akinetic and myoclonic seizures.

**Pharmacodynamics**
Clonazepam, a benzodiazepine, is used primarily as an anticonvulsant in the treatment of absence seizures, petit mal variant seizures (Lennox-Gastaut syndrome), akinetic and myoclonic seizures, and nocturnal myoclonus.

**Mechanism of Action**
Allosteric interactions between central benzodiazepine receptors and gamma-aminobutyric acid (GABA) receptors potentiate the effects of GABA. As GABA is an inhibitory neurotransmitter, this results in increased inhibition of the ascending reticular activating system. Benzodiazepines, in this way, block the cortical and limbic arousal that occurs following stimulation of the reticular pathways.
Absorption
Clonazepam is rapidly and completely absorbed after oral administration. The absolute bioavailability of clonazepam is about 90%.

Metabolism
Hepatic (cytochrome P450, including CYP3A). Biotransformation occurs mainly by reduction of the 7-nitro group to the 4-amino derivative. This derivative can be acetylated, hydroxylated, and glucuronidated.

Route of Elimination
Clonazepam is highly metabolized, with less than 2% unchanged clonazepam being excreted in the urine. Metabolites of Klonopin are excreted by the kidneys.

Toxicity
Somnolence, confusion, coma, and diminished reflexes

Affected Organisms
Humans and other mammals
+91-22-65050009

Wireless 24x7 HELPDESK:
+9191-46-951951
+9191-46-950950

Blackberry Pin:
32E6500D | 32E65010 | 28415C58

Email:
apollo@Hotmail.Co.in
Sales@apolollopharma.in
Export@apolollopharma.in
purchase@apolollopharma.in

www.apollo.mn
www.apollo.com.co
www.apollopharmaceuticals.com

Chat:
MSN Hotmail:VipinrSaxena
Skype NAME:VipinrSaxena
Rocketmail:VipinrSaxena
Google mail:VipinrSaxena
BlackBerry:28415C58

Regd. Office :-
1104, Maker Chamber V,
Nariman Point
Mumbai, INDIA
Pin:400021

Industrial Office
D-62, OIC India
Oshiwara Industrial Centre,
New Link Road,
Goregoan West,
Mumbai, INDIA
Pin: 400104
Manufacturing Unit Address:
Plot No. 117A,
Village: Chamble
Near MonaTona Limited, Wada,
Maharashtra,
PIN : 421312 | INDIA

Email:
apollo@Hotmail.Co.in
Sales@apollopharma.in
Export@apollopharma.in
purchase@apollopharma.in

Clonazepam

CAS Number: 1622-61-3
Molecular Weight: 315.71 g/mol
Molecular Formula: C_{15}H_{18}ClN_{3}O_{3}
Systematic (IUPAC): 5-(2-chlorophenyl)-7-nitro-2,3-dihydro-1H-1,4-benzodiazepine-2-one
Clonazepam

CAS Number: 1622-61-3
Molecular Weight: 315.71 g/mol
Molecular Formula: C₁₅H₁₂ClN₃O₃
Systematic (IUPAC): 5-(2-chlorophenyl)-7-nitro-2,3-dihydro-1H-1,4-benzodiazepin-2-one
Clonazepam

CAS Number: 1622-61-3
Molecular Weight: 315.71 g/mol
Molecular Formula: C<sub>12</sub>H<sub>15</sub>CIN<sub>3</sub>O<sub>3</sub>
Systematic (IUPAC): 5-(2-chlorophenyl)-7-nitro-2,3-dihydro-1H-1,4-benzodiazepin-2-one
Clonazepam

CAS Number: 1622-61-3
Molecular Weight: 315.71 g/mol
Molecular Formula: C_{13}H_{10}ClN_{2}O_{3}
Systematic (IUPAC): 5-(2-chlorophenyl)-7-nitro-2,3-dihydro-1H-1,4-benzodiazepin-2-one
Clonazepam

CAS Number: 1622-61-3
Molecular Weight: 315.71 g/mol
Molecular Formula: C_{18}H_{15}ClN_{2}O_{3}
Systematic (IUPAC): 5-(2-chlorophenyl)-7-nitro-2,3-dihydro-1H-1,4-benzodiazepine-2-one
Clonazepam

CAS Number: 1622-61-3
Molecular Weight: 315.71 g/mol
Molecular Formula: C$_{13}$H$_{16}$ClN$_{3}$O$_{3}$
Systematic (IUPAC): 5-(2-chlorophenyl)-7-nitro-2,3-dihydro-1H-1,4-benzodiazepin-2-one
Clonazepam

CAS Number: 1622-61-3
Molecular Weight: 315.71 g/mol
Molecular Formula: C_{12}H_{10}ClN_{2}O_{3}
Systematic (IUPAC): 5-(2-chlorophenyl)-7-nitro-2,3-dihydro-1H-1,4-benzodiazepin-2-one