

**Etafedrine Hydrochloride CAS No. : 5591-29-7**

PHARMACOLOGICAL ACTION:Etafedrine a sympathomimetic agent, acts on the sympathetic receptors of the bronchial tree relaxing spasm in a manner similar to that of ephedrine.

Active Pharmaceuticals Ingredients Manufacturers



Taj Pharma PDF

# Taj Pharmaceuticals Ltd.

## Etafedrine Hydrochloride

### CAS No. : 5591-29-7



**IUPAC Name: 2-[ethyl(methyl)amino]-1-phenylpropan-1-ol hydrochloride CAS Registry Number: 5591-29-7**

Molecular Formula : C<sub>12</sub>H<sub>19</sub>NO.HCl

Molecular Weight : 229.75

CAS No. : [5591-29-7]

Chemical Name :

1. (1R,2S)-2-[Ethyl (methyl)amino]-1-phenylpropan-1-ol Hydrochloride.

2. (1R,2S)-2-Ethylmethylamino-1-phenyl-1-propanol Hydrochloride

H-Bond Donor: 2 H-Bond Acceptor: 2

#### PHARMACOLOGICAL ACTION:

Etafedrine a sympathomimetic agent, acts on the sympathetic receptors of the bronchial tree relaxing spasm in a manner similar to that of ephedrine.

It helps to control cough associated with inflammation of the mouth and throat that is not helped by cough medications that are less strong.

Hydrocodone is a narcotic medication that is an antitussive (cough suppressant). It helps to reduce cough by affecting the cough centre in the brain.

Etafedrine belongs to the family of medications called decongestants. It works by narrowing blood vessels in the nasal passages, helping to relieve nasal stuffiness.

Do not give this medication to anyone else, even if they have the same symptoms as you do. It can be harmful for people to take this medication if their doctor has not prescribed it.

#### The recommended dose of this medication is

Adults: 5 mL (1 teaspoonful) every 3 to 5 hours as needed, but not more than 30 mL in any 24-hour period.

Children 6 to 12 years of age: 2.5 mL to 5 mL every 3 to 5 hours as needed to a maximum of 15 mL in any 24-hour period.

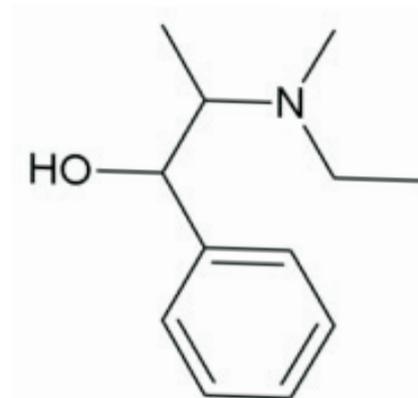
Children 1 to 6 years of age: 1.25 mL to 2.5 mL every 3 to 5 hours as needed to a maximum of 3 doses in any 24-hour period.

Use an oral syringe to measure each dose of the liquid as it gives a more accurate measurement than household teaspoons.

Store this medication at room temperature, protect it from light, and keep it out of the reach of children.

Do not dispose of medications in wastewater (e.g. down the sink or in the toilet) or in household garbage. Ask your pharmacist how to dispose of medications that are no longer needed or have expired.

#### Side effects occur





TAJ PHARMACEUTICALS LIMITED

## **Etafedrine**

Formula C<sub>12</sub>H<sub>20</sub>ClNO

Cas No. **5591-29-7**

- \* fast, slow, or pounding heartbeat
- \* hallucinations (seeing, hearing, or feeling things that are not there)
- \* hives, itching, or skin rash
- \* increased sweating
- \* irregular breathing
- \* mental depression or other mood or mental changes
- \* redness or flushing of face
- \* ringing or buzzing in the ears
- \* shortness of breath, wheezing, or troubled breathing
- \* swelling of face
- \* trembling or uncontrolled muscle movements
- \* unusual excitement or restlessness (especially in children)



Stop taking the medication and seek immediate medical attention if any of the following occur:

- \* cold, clammy skin
- \* headache (severe or continuing)
- \* low blood pressure
- \* pinpoint pupils of eyes
- \* seizures
- \* severe confusion or disorientation
- \* severe dizziness
- \* severe drowsiness
- \* severe nausea or vomiting
- \* severe nervousness or restlessness
- \* severe weakness
- \* shortness of breath or troubled breathing (severe or continuing)
- \* signs of a severe allergic reaction such as hives; difficulty breathing; swelling of the tongue, face, mouth, or throat
- \* slow heartbeat



Etafedrine (INN) or ethylephedrine is a long-acting bronchodilator and has the brand name Nethaprin. It is commercially available as both the free base, and as the hydrochloride.

Ethylephedrine may be synthesized by alkylating ephedrine with ethyl iodide. The hydrochloride may be prepared by passing hydrogen chloride through a solution of ethylephedrine in diethyl ether.

### **Etafedrine were studied on the tracheal chain preparation and the atria of the guinea pig and on the rabbit perfused heart.**

Contraction of the tracheal chain by acetylcholine or histamine was antagonized by epinephrine (adrenaline), etafedrine and ephedrine, the relative potencies being 91:1:0.3, respectively.

Propranolol (5 X 10<sup>(-7)</sup> mol/l) completely antagonized the bronchodilator effect of 10<sup>(-4)</sup> mol/l etafedrine on the acetylcholine-evoked contraction. Etafedrine up to 3 X 10<sup>(-4)</sup> mol/l did not increase heart rate or force of contraction in guinea pig atria. In contrast to tyramine and ephedrine (both 10<sup>(-5)</sup> mol/l), etafedrine (10<sup>(-4)</sup> mol/l) failed to release 3H-norepinephrine (noradrenaline) in the perfused rabbit heart. Moreover, the concentration-dependent positive chronotropic and inotropic effects of norepinephrine in isolated atria were slightly, but not significantly enhanced by etafedrine.



It is concluded that N-ethylation of ephedrine suppresses the indirect sympathomimetic activity and markedly enhances the efficacy on beta 2-adrenoceptors.

Synonyms: Nethamine, Nethaphyl, Etafedrine hydrochloride, Nethamine (TN), Etafedrine hydrochloride (USAN), Etafedrine hydrochloride [USAN], CID68646, EINECS 227-000-5, D04072, alpha-(1-(Ethylmethylamino)ethyl)benzyl alcohol hydrochloride, Benzenemethanol, alpha-(1-(ethylmethylamino)ethyl)-, hydrochloride, 5591-29-7, BENZYL ALCOHOL, alpha-(1-(ETHYLMETHYLAMINO)ETHYL)-, HYDROCHLORIDE, (-)-, 530-35-8, 7681-79-0

**Specifications :**

1. Description : White to off white crystalline powder
2. Identification: Infrared spectrum of sample is concordant with standard.
3. Melting range : 183° - 186°C
4. Specific rotation : - 17.5° - 19.5° (5 % solution in water)
5. Moisture content : Not more than 0.5 % w/w
6. Sulphated ash : Not more than 0.1 % w/w
7. Assay (Non.Aq. Titration) : Between 99.0 and 100.5 % w/w (dried basis)



**Note:**

These API/ chemicals are designated as those that are used in the manufacture of the controlled substances and are important to the manufacture of the substances. For any (Control Substance) products Import and Export \*\*\* subjected to your country government laws /control substance ACT.

**Note /Government Notification:** These chemicals are designated as those that are used in the manufacture of the controlled substances and are important to the manufacture of the substances. For any (Control Substance) products Import and Export \*\*\* subjected to your country government laws /control substance ACT. Information: The information on this web page is provided to help you to work safely, but it is intended to be an overview of hazards, not a replacement for a full Material Safety Data Sheet (MSDS). MSDS forms can be downloaded from the web sites of many chemical suppliers. Also that the information on the PTCL Safety web site, where this page was hosted, has been copied onto many other sites, often without permission. If you have any doubts about the veracity of the information that you are viewing, or have any queries, please check the URL that your web browser displays for this page. If the URL begins "www.tajapi.com/www/Denatonium Benzoate.htm/" the page is maintained by the Safety Officer in Physical Chemistry at Oxford University. If not, this page is a copy made by some other person and we have no responsibility for it.

The Controlled Substances Act (CSA) was enacted into law by the Congress of the United States as Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970.[1] The CSA is the federal U.S. drug policy under which the manufacture, importation, possession, use and distribution of certain substances is regulated. The Act also served as the national implementing legislation for the Single Convention on Narcotic Drugs.

This document plus the full buyer/ prescribing information, prepared for health professionals can be found at:

<http://www.tajapi.com>

or by contacting the sponsor, Taj Pharmaceuticals Limited., at:  
91 022 30601000.

This leaflet was prepared by  
Taj Pharmaceuticals Limited,  
Mumbai (India).

MPSTJ278

Last revised: 29 August 2009