

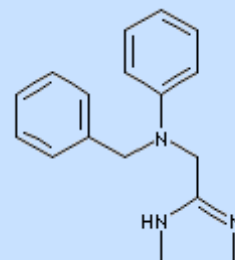
# ANTAZOLINE HYDROCHLORIDE

## SYNONYMS

N-(4,5-Dihydro-1H-imidazol-2-ylmethyl)-N-(phenylmethyl)aniline hydrochloride; 2-(N-Benzylanilinomethyl)-2-imidazoline hydrochloride; 2-(N-Phenyl-N-benzylaminomethyl)imidazoline hydrochloride; 2-Phenylbenzylaminomethylimidazoline hydrochloride; Antazoline HCl; Antazolinium chloratum; Antistine hydrochloride; Fenazolina; Histazine; Phenazoline hydrochloride;

## PRODUCT IDENTIFICATION

CAS RN	2508-72-7; 91-75-8 (Parent)
EINECS RN	219-719-8
FORMULA	C <sub>17</sub> H <sub>19</sub> N <sub>3</sub> ·HCl
MOL WEIGHT	301.81



## PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	white to almost white crystalline powder
MELTING POINT	240 C (Decomposes)
BOILING POINT	
DENSITY	
SOLUBILITY IN WATER	sparingly soluble (soluble in alcohol, slightly soluble in methylene chloride)
pH	
VAPOR DENSITY	
REFRACTIVE INDEX	
FLASH POINT	

## GENERAL DESCRIPTION

Histamine H1-receptor antagonists are used to relieve the symptoms of an immediate allergic reaction. They have additional anti-inflammatory effects that could result from an inhibition of the transcription factors activator protein-1 (AP-1) and nuclear factor-kappa B (NF-kappaB). The implication of the H1-receptor in these effects is controversial. Diphenhydramine is a first-generation H1-receptor antagonist while mizolastine and desloratadine are second-generation compounds. Mizolastine is also an inhibitor of 5-lipoxygenase (5-LO), an enzyme that has been involved in NF-kappaB activation. (source: <http://www.ingentaconnect.com>)

Antazoline is an antihistamine of the ethylenediamine class, which are selective H1-antagonists. When used systemically, this group of antihistamines can cause moderate sedation (despite having weak CNS effects), gastric disturbances and skin sensitisation. Antazoline competitively blocks H1 receptors. Effects mediated by H1 receptors include the contraction of smooth muscle and the dilatation and increased permeability of the capillaries. Naphazoline is a sympathomimetic with alpha adrenergic activity. Its vasoconstrictive effect reduces redness in allergic conjunctivitis. Local vasoconstriction usually occurs within 10 minutes and may persist for 2 to 6 hours. The antihistamine antazoline is effective in providing relief of itching. The use of products combining an antihistamine and a vasoconstrictor is well established in the symptomatic relief of allergic eye disease. (source: <http://www.novartis.com.au>)

Antazoline is an anti-histamine. It acts by blocking the action of histamine which is a chemical that is released when an allergic response occurs. Histamine is the chemical in the body that causes the symptoms of an allergic reaction. These can include inflammation of the skin, airways or tissues, rashes, itching of the skin, eyes or nose, nasal congestion and narrowing of the airways. Xylometazoline acts on receptors in the walls of blood vessels causing them to narrow. As a result, less blood travels through the vessels to the eye. This works to prevent histamine from entering the eye membrane by restricting the blood flow. It also helps decrease the appearance of red eye caused by dilated blood vessels. Antazoline and xylometazoline are used in combination as eye drops so that they can act directly where



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they are needed. By blocking the actions of histamine in the eye, antazoline prevents and relieves the typical symptoms of eye allergies such as itch, swelling and mucus secretion. By decreasing blood supply to the eye, xylometazoline helps prevent excess histamine reaching the eye and reduces eye redness. (source: <http://www.netdoctor.co.uk>)

Antazoline (Pharmacological Action)

Histamine H1 Antagonists - Drugs that selectively bind to but do not activate histamine H1 receptors, thereby blocking the actions of endogenous histamine. Included here are the classical antihistaminics that antagonize or prevent the action of histamine mainly in immediate hypersensitivity. They act in the bronchi, capillaries, and some other smooth muscles, and are used to prevent or allay motion sickness, seasonal rhinitis, and allergic dermatitis and to induce somnolence. The effects of blocking central nervous system H1 receptors are not as well understood.

Anti-Allergic Agents - Agents that are used to treat allergic reactions. Most of these drugs act by preventing the release of inflammatory mediators or inhibiting the actions of released mediators on their target cells. (From AMA Drug Evaluations Annual, 1994, p475) (source: <http://pubchem.ncbi.nlm.nih.gov>)

## STABILITY AND REACTIVITY

STABILITY	Stable under normal conditions.
INCOMPATIBLE MATERIALS	Light
DECOMPOSITION PRODUCTS	Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen chloride
POLYMERIZATION	
NFPA RATINGS	Health: 2, Flammability: 0, Reactivity: 0

## SAFETY

HAZARD NOTES	Toxic. Harmful. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.
EYE	Cause eye irritation.
SKIN	Cause skin irritation.
INGESTION	Harmful.
INHALATION	Harmful.
CHRONIC	

## SALES SPECIFICATION

APPEARANCE	white to almost white crystalline powder
IDENTIFICATION	Pass tests (IR, TLC)
ASSAY	99.0% ~ 101.0%
LOSS ON DRYING	0.5% max
RESIDUE ON IGNITION	0.1% max
MELTING POINT	235 - 240 C
HEAVY METALS	20ppm max

## TRANSPORT & REGULATORY INFORMATION

UN NO.	
HAZARD CLASS	
PACKING GROUP	
HAZARD SYMBOL	XN
RISK PHRASES	20/21/22-36/37/38
SAFETY PHRASES	26-36



# ANTAZOLINE HYDROCHLORIDE

PACKING

PRICE

