Pyridoxine Hydrochloride

Human Nutrition

BASF
The Chemical Company

Chemical names
Vitamin B_6 hydrochloride, pyridoxol hydrochloride

CAS No.	58-56-0
EINECS No.	200-386-2

Product number

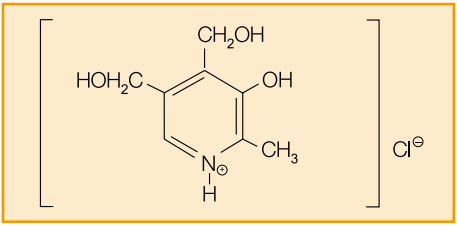
10228713 kosher

Description
White or almost white, crystalline, odorless powder with a sour taste. It melts at approximately 206°C with decomposition.

Solubility
Readily soluble in water (approx. 25 g/100 ml of water at 25°C), somewhat soluble in ethanol and virtually insoluble in ether, chloroform and acetone.

Monographs
The product complies with the current "Pyridoxine Hydrochloride" Ph.Eur., the "Pyridoxine Hydrochloride" USP, "Pyridoxol Hydrochloride" Ph.Jap. and the "Pyridoxine Hydrochloride" FCC monographs.

Particle-size distribution
Min. 95% smaller than 150 µm (100 mesh USP)



$C_8H_{12}NO_3Cl$ Molar mass 205.6 g/mol

Specification

Assay:	98.0-102.0% (USP) 99.0-101.0% (Ph. Eur.)
pH value (5% in water):	2.4-3.0
Loss on drying:	max. 0.5% (3 h, 105°C)
Sulphated ash:	max. 0.1%
Lead (FCC):	max. 2 mg/kg
Heavy metals:	max. 20 mg/kg
Chloride (in the dry substance, USP):	conforms
Organic volatile impurities (USP):	conforms
Clarity of the solution (5% in water):	conforms
Color of the solution (5% in water):	conforms
Related substances (TLC):	conforms

Unless otherwise stated, the methods of analysis can be found in the Ph.Eur.

Stabilization/Stability
Stored in the unopened original packaging at room temperature (max. 25°C), the product is stable for at least 48 months. It is quite stable in dry mixtures and solutions.

Furthermore, the product is stable to heat, acids and alkalis. The compound is only dissociated when in dilute neutral or alkaline solutions and exposed to light. Solutions intended to be heat-sterilized should therefore have a pH of less than 6.

Vitamin B_6 should not be used in conjunction with iron preparations or other iron-containing ingredients because it forms a colored Fe-complex.

Standard packaging
10 and 25 kg.
Please see appendix I for further information.

Storage
The product should be stored in the tightly sealed original packaging at a temperature below 25°C, in a dark, dry place. It should not be stored or transported along with metals.

Applications
Dietary supplements:
Pyridoxine hydrochloride can be used in almost all dosage forms (mono-preparations, B-complex as well as multivitamin formulae in the form of capsules, tablets, sugar-coated tablets, effervescent tablets, granules, syrups, solutions etc.).

Food products:
It is added to a large number of food products such as flour, bread, baked goods, pasta, breakfast cereal, dietetic products for weight reduction and food products for babies and small children. In conjunction with other vitamins, it is also used for the fortification of food products such as beverages (multivitamin juices, instant drink powders, isotonic beverages etc.), confectionery and dairy products.

Note
Pyridoxine hydrochloride must be handled in accordance with the Safety Data Sheet.