



# Certificate of analysis

Product name: Zoledronic acid

Cas number: 118072-93-8

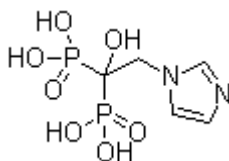
Molecular Formula:  $C_5H_{10}N_2O_7P_2$

Molecular Weight: 272.09

Date of production: Apr. 04, 2018

Batch No: 20180404

Exp Date: Apr. 03, 2020



Chemical structure:

Items	Specifications	Results
Appearance	White or off-white crystalline powder	Conforms
Identification	NMR HPLC	Conforms
Solubility	Sparingly soluble in 0.1N sodium hydroxide solution, slightly soluble in water and 0.1N hydrochloric acid, practically insoluble in ethanol.	Conforms
Appearance of solution	The solution should be clear and colorless, if opalescent, should not more opalescent than reference suspension 1; if colored, not more intensely colored than Y2	The solution is clear and colorless
PH	2.0~4.0	2.6
Acidity	5.0%~7.0%	5.7%
Loss on drying	$\leq 0.2\%$	0.02%
Chloride	$\leq 0.5\%$	0.4%
Phosphite	$\leq 0.001$	Conforms
Heavy Metals	10ppm	Conforms
Unspecified impurity	$\leq 0.3$	0.06%
Total impurities	$\leq 1.0\%$	0.1%
Purity (By HPLC)	$\geq 99.9\%$	99.9%

**It complies with the Enterprise Standard.**