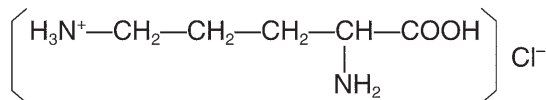


# L-ORNITHINE MONOHYDROCHLORIDE

CAS NO. 3184-13-2

## MOLECULAR STRUCTURE AND FORMULA



$\text{C}_5\text{H}_{12}\text{N}_2\text{O}_2 \cdot \text{HCl} : 168.62$   
 $\text{N} : 16.61\%$

## DESCRIPTION

White crystals or crystalline powder  
 Odorless  
 Characteristic taste

## IDENTIFICATION

Compare the infrared absorption spectrum of sample (dry, 1-2 mg) with that of the standard by diffuse reflection method.

## SPECIFICATION AND PROCEDURE

State of solution (Transmittance)	Not Less Than 98.0%	Sec.-1 10%, H <sub>2</sub> O
pH	5.0 ~ 6.0	Sec.-26, 3%
Specific rotation $[\alpha]_D^{20}$	+23.0 ~ +24.5°	Sec.-2, dry 8%, 6 mol/l HCl
Ammonium (NH <sub>4</sub> )	Not More Than 0.020%	Sec.-3-(3), 0.5g
Chloride content (Cl)	20.6 ~ 21.3%	Sec.-24-(1), dry → 0.2 g 20 ml of 0.1 mol/l AgNO <sub>3</sub> solution
Sulfate (SO <sub>4</sub> )	Not More Than 0.020%	Sec.-5, 0.84 g 0.35 ml of 0.005 mol/l H <sub>2</sub> SO <sub>4</sub>
Iron (Fe)	Not More Than 10 ppm	Sec.-6-(2), 2.0 g 2.0 ml of Standard solution
Heavy metals (Pb)	Not More Than 10 ppm	Sec.-7-(1), 2.0 g 2.0 ml of Standard solution
Arsenic (As <sub>2</sub> O <sub>3</sub> )	Not More Than 1 ppm	Sec.-8-(1), 2.0 g 2.0 ml of Standard solution
Loss on drying	Not More Than 0.20%	Sec.-9-(1) 105°C, 3hr
Residue on ignition	Not More Than 0.10%	Sec.-10, 2 g
Foreign amino acids	Not Detected (TLC, 10 µg)	Sec.-13, Solvent F Nin A
Endotoxin*	Less Than 6.0 EU/g	Sec.-34-(2), 1.0 g/100 ml
Assay (dry basis)	99.0 ~ 101.0%	Sec.-15-(1), dry → 0.14 g 0.1 mol/l HClO <sub>4</sub> 1 ml = 16.862 mg C <sub>5</sub> H <sub>12</sub> N <sub>2</sub> O <sub>2</sub> ·HCl

\* The endotoxin-certified grade will be supplied on request.

## STORAGE

Controlled room temperature in tight container