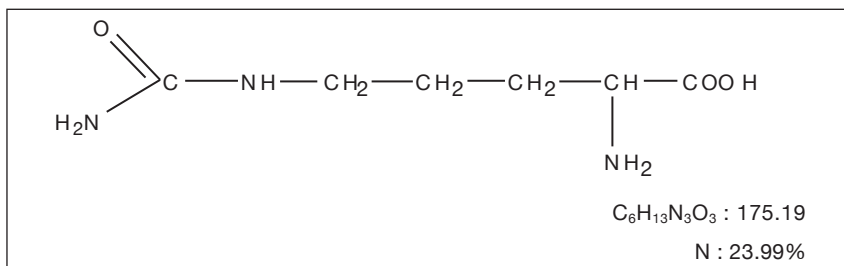


# L-CITRULLINE

CAS NO. 372-75-8

## MOLECULAR STRUCTURE AND FORMULA



## DESCRIPTION

White crystals or crystalline powder

## IDENTIFICATION

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

## SPECIFICATION AND PROCEDURE

State of solution	Colorless and clear	Visual test, 2%, H <sub>2</sub> O
pH	5.7 ~ 6.7	Sec.-26, 2%
Specific rotation $[\alpha]_D^{20}$	+24.5 ~ +26.5°	Sec.-2, dry, 8%, 6 mol/l HCl
Ammonium (NH <sub>4</sub> )	Not More Than 0.020%	Sec.-3-(3), 0.25 g
Chloride (Cl)	Not More Than 0.020%	Sec.-4-(1), 0.63 g 0.30 ml of 0.01 mol/l HCl
Sulfate (SO <sub>4</sub> )	Not More Than 0.020%	Sec.-5, 0.84 g 0.30 ml of 0.005 mol/l H <sub>2</sub> SO <sub>4</sub>
Iron (Fe)	Not More Than 10 ppm	Sec.-6-(1), 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 1.00%	Sec.-9-(1), 1 g, 105°C, 3 hr
Residue on ignition	Not More Than 0.10%	Sec.-10, 2 g
Related substances	Not More Than 0.5%	Sec.-43, 0.20 g, 0.02 mol/l HCl
Assay (dry basis)	99.0 ~ 101.0%	Sec.-15-(1), dry → 0.13 g, 0.1 mol/l HClO <sub>4</sub> 1 ml = 17.519 mg C <sub>6</sub> H <sub>13</sub> N <sub>3</sub> O <sub>3</sub>

## STORAGE

Controlled room temperature in tight container