

## SPECIFICATION

Diammonium Hydrogen Citrate  
for Medicine Test

REQUIREMENT	SPECIFICATION
* Appearance	White, crystals ~ crystalline powder
Assay (C <sub>6</sub> H <sub>14</sub> N <sub>2</sub> O <sub>7</sub> )	min.99.0%(mass/mass)
Solubility in water	to pass test
pH of a 50g/L solution at 25°C	4.6~5.2
Residue after ignition (as sulfate)	max.0.02%(mass/mass)
Chloride (Cl)	max.5ppm(mass/mass)
Phosphate (PO <sub>4</sub> )	max.5ppm(mass/mass)
Sulfate (SO <sub>4</sub> )	max.0.005%(mass/mass)
Sodium (Na)	max.0.02%(mass/mass)
Potassium (K)	max.0.01%(mass/mass)
Copper (Cu)	max.2ppm(mass/mass)
Zinc (Zn)	max.2ppm(mass/mass)
Lead (Pb)	max.2ppm(mass/mass)
Iron (Fe)	max.5ppm(mass/mass)
Oxalate (as C <sub>2</sub> H <sub>2</sub> O <sub>4</sub> )	max.0.01%(mass/mass)
Tartrate (as C <sub>4</sub> H <sub>6</sub> O <sub>6</sub> )	max.0.01%(mass/mass)
Assay (USP-NF)	98.0~103.0%
Insoluble matter (USP-NF)	max.0.005%
Residue after ignition (USP-NF)	max.0.01%
Chloride (Cl) (USP-NF)	max.0.001%
Heavy metals (as Pb) (USP-NF)	max.5ppm
Iron (Fe) (USP-NF)	max.0.001%
Oxalate (C <sub>2</sub> O <sub>4</sub> ) (USP-NF)	to pass test
Phosphate (PO <sub>4</sub> ) (USP-NF)	max.5ppm
Sulfur compounds (as SO <sub>4</sub> ) (USP-NF)	max.0.005%
pH (Ph.Eur.)	about 4.3

JIS K 8284:2021(\*:Additional test performed by Wako but not required by JIS)