

## SPECIFICATION

Ammonia Solution  
for Medicine Test

REQUIREMENT	SPECIFICATION
* Appearance	Colorless clear liquid
Assay (NH <sub>3</sub> )	28.0~30.0%(mass/mass)
Residue after evaporation	max.0.002%(mass/mass)
Carbonate (CO <sub>3</sub> )	max.0.002%(mass/mass)
Chloride (Cl)	max.0.3ppm(mass/mass)
Phosphate (PO <sub>4</sub> )	max.0.5ppm(mass/mass)
Silicate (as SiO <sub>2</sub> )	max.0.001%(mass/mass)
Sulfate (SO <sub>4</sub> )	max.2ppm(mass/mass)
Sulfide (S)	max.0.2ppm(mass/mass)
Sodium (Na)	max.1ppm(mass/mass)
Potassium (K)	max.1ppm(mass/mass)
Copper (Cu)	max.0.1ppm(mass/mass)
Magnesium (Mg)	max.1ppm(mass/mass)
Calcium (Ca)	max.1ppm(mass/mass)
Zinc (Zn)	max.0.1ppm(mass/mass)
Lead (Pb)	max.0.1ppm(mass/mass)
Iron (Fe)	max.0.2ppm(mass/mass)
Nickel (Ni)	max.0.1ppm(mass/mass)
Substances reducing permanganate (as O)	max.8ppm(mass/mass)
Appearance (USP-NF)	to pass test
Assay (as NH <sub>3</sub> ) (USP-NF)	28.0~30.0%
Residue after ignition (USP-NF)	maximum 0.002%
Carbon dioxide (CO <sub>2</sub> ) (USP-NF)	maximum 0.002%
Chloride (Cl) (USP-NF)	maximum 0.5ppm
Nitrate (NO <sub>3</sub> ) (USP-NF)	maximum 2ppm
Phosphate (PO <sub>4</sub> ) (USP-NF)	maximum 2ppm
Sulfate (SO <sub>4</sub> ) (USP-NF)	maximum 2ppm
Heavy metals (as Pb) (USP-NF)	maximum 0.5ppm
Iron (Fe) (USP-NF)	maximum 0.2ppm

Substances reducing permanganate (USP-NF)	to pass test
Appearance of solution (Ph.Eur.)	to pass test
Oxidisable substances (Ph.Eur.)	to pass test
Pyridine and related substances (as pyridine) (Ph.Eur.)	maximum 2ppm
Carbonates (Ph.Eur.)	maximum 60ppm
Chlorides (Ph.Eur.)	maximum 1ppm
Sulphates (Ph.Eur.)	maximum 5ppm
Iron (Ph.Eur.)	maximum 0.25ppm
Residue on evaporation (Ph.Eur.)	maximum 20mg/L
Assay (Ph.Eur.)	25.0~30.0%

JIS K 8085:2021(\*:Additional test performed by Wako but not required by JIS)