

## SPECIFICATION

## L(+)-Glutamine

## Guaranteed Reagent

REQUIREMENT	SPECIFICATION
* Appearance Assay (C <sub>5</sub> H <sub>10</sub> N <sub>2</sub> O <sub>3</sub> ) Solubility in water pH of a 20g/L solution at 25°C Specific rotation [ $\alpha$ ] <sub>D20</sub> Loss on drying at 105°C Residue after ignition (as sulfate) Chloride (Cl) Sulfate (SO <sub>4</sub> ) Lead (Pb) Arsenic (As) Iron (Fe) Foreign amino acids	White, crystals ~ powder min.99.0%(mass/mass) to pass test 4.0~6.0 +6.3~+7.3° max.0.2%(mass/mass) max.0.05%(mass/mass) max.0.01%(mass/mass) max.0.02%(mass/mass) max.0.001%(mass/mass) max.1ppm(mass/mass) max.0.001%(mass/mass) to pass test

JIS K 9103 : 2020(\*:Additional test performed by Wako but not required by JIS)