

## SPECIFICATION

Hydrochloric Acid  
for Electronics Industry

REQUIREMENT	SPECIFICATION
Appearance	Colorless clear liquid
Residue after evaporation	max.10ppm
Residue after ignition	max.2ppm
Sulfate (SO <sub>4</sub> )	max.0.2ppm
Free chlorine	to pass test
Substances reducing iodine	to pass test
Sulfite (SO <sub>3</sub> )	max.1ppm
Bromine (Br)	max.10ppm
Iodide (I)	max.1ppm
Ammonium (NH <sub>4</sub> )	max.1ppm
Assay	35.0~37.0%
Silver (Ag)	max.1ppb
Aluminium (Al)	max.200ppb
Arsenic (As)	max.5ppb
Barium (Ba)	max.100ppb
Calcium (Ca)	max.300ppb
Cadmium (Cd)	max.1ppb
Cobalt (Co)	max.1ppb
Chromium (Cr)	max.2ppb
Copper (Cu)	max.10ppb
Iron (Fe)	max.100ppb
Potassium (K)	max.50ppb
Lithium (Li)	max.5ppb
Magnesium (Mg)	max.200ppb
Manganese (Mn)	max.5ppb
Sodium (Na)	max.500ppb
Nickel (Ni)	max.10ppb
Lead (Pb)	max.20ppb
Strontium (Sr)	max.20ppb

Zinc (Zn)

max.50ppb

Mercury (Hg)

max.5ppb

Particles (0.5  $\mu$ m or more)

under investigation