

## PRODUCT SPECIFICATION SHEET

### Hydrochloric Acid, 36.5-38%

Electronic/Semiconductor Grade

Test	Specification	Typical Results
Assay (HCl), %	37-38	37-38
Ammonium (NH <sub>4</sub> ), ppb	Max 500	Max 500
Color, APHA	Max 7	Max 7
Phosphate (PO <sub>4</sub> ), ppb	Max 50	Max 50
Heavy Metals, ppb	Max 100	Max 100
Bromide (Br), ppb	Max 50000	Max 50000
Residue After Ignition, ppb	Max 3000	Max 3000
Sulfate (SO <sub>4</sub> ), ppb	Max 500	Max 500
Sulfite (SO <sub>3</sub> ), ppb	Max 800	Max 800
Aluminum (Al), ppb	Max 50	Max 50
Arsenic and Antimony (as As), ppb	Max 5	Max 5
Barium (Ba), ppb	Max 10	Max 10
Beryllium (Be), ppb	Max 10	Max 10
Bismuth (Bi), ppb	Max 20	Max 20
Boron (B), ppb	Max 20	Max 20
Calcium (Ca), ppb	Max 50	Max 50
Chromium (Cr), ppb	Max 20	Max 20
Cobalt (Co), ppb	Max 10	Max 10
Copper (Cu), ppb	Max 10	Max 10
Gallium (Ga), ppb	Max 20	Max 20

Germanium (Ge), ppb	Max 20	Max 20
Gold (Au), ppb	Max 10	Max 10
Indium (In), ppb	Max 10	Max 10
Iron (Fe), ppb	Max 50	Max 50
Lead (Pb), ppb	Max 10	Max 10
Lithium (Li), ppb	Max 10	Max 10
Magnesium (Mg), ppb	Max 20	Max 20
Manganese (Mn), ppb	Max 10	Max 10
Molybdenum (Mo), ppb	Max 20	Max 20
Nickel (Ni), ppb	Max 10	Max 10
Platinum (Pt), ppb	Max 20	Max 20
Potassium (K), ppb	Max 20	Max 20
Silver (Ag), ppb	Max 10	Max 10
Sodium (Na), ppb	Max 50	Max 50
Strontium (Sr), ppb	Max 20	Max 20
Titanium (Ti), ppb	Max 20	Max 20
Zinc (Zn), ppb	Max 20	Max 20
Zirconium (Zr), ppb	Max 20	Max 20
Particle Count, 0.5 mm, ct/ml	Max 150	Max 150
Particle Count, 1.0 mm, ct/ml	Max 10	Max 10

This product is for further commercial manufacturing, laboratory or research use, and may be used as an excipient or a process solvent for pharmaceutical purposes. It is not intended for use as an active ingredient in drug manufacturing nor as a medical device or disinfectant. Appropriate/legal use of this product is the responsibility of the user

22111 Highway 71 West, Suite 601, Spicewood, Texas 78669

Direct: 512-668-9918

[www.laballey.com](http://www.laballey.com) | [customerservice@laballey.com](mailto:customerservice@laballey.com)