

## Certificate of Analysis

<b>Product</b>	Hydrochloric Acid 37%	<b>Batch No.</b>	: 21 04 0282
<b>Grade</b>	AR.	<b>Manufacturing date</b>	: 30/04/2021
<b>Code No.</b>	AR1107	<b>Best before</b>	: 04/2023

Items	Descriptions	Specifications	Test Results
1	Assay (by acidimetry)	37% min.	37.3% (w/w)
2	Appearance	Passes test	Passes test
3	Color (APHA)	10 max.	< 10
4	Residue after Ignition	5.0 ppm max.	< 5.0 ppm
5	Ammonium (NH <sub>4</sub> )	3.0 ppm max.	< 3.0 ppm
6	Free Chlorine (Cl)	1.0 ppm max.	< 1.0 ppm
7	Bromide (Br)	1.0 ppm max.	< 1.0 ppm
8	Sulfate (SO <sub>4</sub> )	1.0 ppm max.	< 1.0 ppm
9	Sulfite (SO <sub>3</sub> )	1.0 ppm max.	< 1.0 ppm
10	Heavy metals (as Pb)	1.0 ppm max.	< 1.0 ppm
11	Arsenic (As)	0.01 ppm max.	< 0.01 ppm
12	Cadmium (Cd)	0.01 ppm max.	< 0.01 ppm
13	Iron (Fe)	0.2 ppm max.	< 0.2 ppm
14	Lead (Pb)	0.01 ppm max.	< 0.01 ppm
15	Zinc (Zn)	0.02 ppm max.	< 0.02 ppm

This is to certify the above batch has been tested and complies with this specification.

Ladaphan.

Chemist

Achan.

Technical Manager