

Certificate of Analysis

Product	Ammonium Hydroxide 25% Solution	Batch No.	: 21 05 0455
Grade	AR.	Manufacturing date	: 31/05/2021
Code No.	AR1304	Best before	: 05/2023

Items	Descriptions	Specifications		Test Results	
1	Assay (by acidimetry)	25%	min.	28.1%	
2	Appearance	Passes test		Passes test	
3	Color (APHA)	10	max.	< 10	
4	Carbon dioxide (CO ₂)	20	ppm max.	< 20	ppm
5	Residue after Ignition	20	ppm max.	< 20	ppm
6	Substances reducing permanganate	Passes test		Passes test	
7	Chloride (Cl)	0.5	ppm max.	< 0.5	ppm
8	Nitrate (NO ₃)	2	ppm max.	< 2	ppm
9	Phosphate (PO ₄)	2	ppm max.	< 2	ppm
10	Sulfate (SO ₄)	0.5	ppm max.	< 0.5	ppm
11	Heavy metals (as Pb)	0.5	ppm max.	< 0.5	ppm
12	Aluminium (Al)	0.05	ppm max.	< 0.05	ppm
13	Barium (Ba)	0.01	ppm max.	< 0.01	ppm
14	Cadmium (Cd)	0.05	ppm max.	< 0.05	ppm
15	Calcium (Ca)	0.1	ppm max.	< 0.1	ppm
16	Chromium (Cr)	0.02	ppm max.	< 0.02	ppm
17	Copper (Cu)	0.02	ppm max.	< 0.02	ppm
18	Iron (Fe)	0.1	ppm max.	< 0.1	ppm
19	Lead (Pb)	0.02	ppm max.	< 0.02	ppm
20	Lithium (Li)	0.02	ppm max.	< 0.02	ppm
21	Magnesium (Mg)	0.02	ppm max.	< 0.02	ppm
22	Manganese (Mn)	0.02	ppm max.	< 0.02	ppm
23	Nickel (Ni)	0.02	ppm max.	< 0.02	ppm
24	Potassium (K)	0.1	ppm max.	< 0.1	ppm
25	Sodium (Na)	0.5	ppm max.	< 0.5	ppm
26	Tin (Sn)	0.01	ppm max.	< 0.01	ppm
27	Zinc (Zn)	0.05	ppm max.	< 0.05	ppm

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

Ladaphan.

Chemist

Achan.

Technical Manager