

**CERTIFICATE OF ANALYSIS**

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by Intertek. Certificate Number. 2317548

Catalogue Number	39003
Lot Number	A0481590
Description	Ammonium hydroxide,for analysis,25% solution in water
CAS Number	1336-21-6
Quality Test/Release Date	10/Dec/2025
Suggested retest date	10/Dec/2028
Country of Origin	BELGIUM
Declaration of Origin	synthetic
BSE/TSE	Not directly derived from or manufactured with any animal byproducts in any way (Including but not limited to fermentation or nutrient broth, catalysts, enzymes).

Result Name	Units	Specifications	Test Value
Appearance (Color)		Clear colorless	Clear colorless
Appearance (Form)		Solution	Solution
Titration with HCl	%	>=25 (as NH3)	26 (as NH3)
Non-volatile matter	%	==<0.002	==<0.002
Barium (Ba)	%	==<0.00001	==<0.00001
Bismuth (Bi)	%	==<0.00001	==<0.00001
Cadmium (Cd)	%	==<0.000005	==<0.000005
Calcium (Ca)	%	==<0.0001	==<0.0001
Cobalt (Co)	%	==<0.00001	==<0.00001
Chromium (Cr)	%	==<0.000005	==<0.000005
Copper (Cu)	%	==<0.00001	==<0.00001
Iron (Fe)	%	==<0.00001	==<0.00001
Gallium (Ga)	%	==<0.000002	==<0.000002
Indium (In)	%	==<0.000002	==<0.000002
Potassium (K)	%	==<0.0001	==<0.0001
Lithium (Li)	%	==<0.000002	==<0.000002
Magnesium (Mg)	%	==<0.00005	==<0.00005
Manganese (Mn)	%	==<0.00001	==<0.00001
Molybdenum (Mo)	%	==<0.00001	==<0.00001
Sodium (Na)	%	==<0.0001	==<0.0001
Nickel (Ni)	%	==<0.000005	==<0.000005
Lead (Pb)	%	==<0.000005	==<0.000005
Platinum (Pt)	%	==<0.00001	==<0.00001
Tin (Sn)	%	==<0.00001	==<0.00001
Strontium (Sr)	%	==<0.0001	==<0.0001
Titanium (Ti)	%	==<0.00001	==<0.00001
Thallium (Tl)	%	==<0.000005	==<0.000005
Zinc (Zn)	%	==<0.00001	==<0.00001
Carbonate (CO3)	%	==<0.001	==<0.001
Chloride (Cl)	%	==<0.00005	==<0.00005
Phosphate (PO4)	%	==<0.00005	==<0.00005
Sulfate (SO4)	%	==<0.0002	==<0.0002
Sulfide (S)	%	==<0.0002	==<0.0002
Reducing substances	%	==<0.0005	==<0.0005

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.



Geert Torfs  
Supervisor, QC

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.