Thermo Fisher Scientific
Ward Hill, MA-Sites

30 Bond Street	220 Neck Road	38 Shelley Road
Ward Hill	Ward Hill	Ward Hill
MA 01835	MA 01835	MA 01835

CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by TUV SUD America Inc.
Certificate Number. 951001163

Catalogue Number	033285
Lot Number	Q02M022
Description	Ammonium hydroxide, ACS, 28.0-30.0% NH_3
CAS Number	1336-21-6
Quality Test/Release Date	03/Apr/2026
Suggested retest date	03/Apr/2029
Country of Origin	United States

Result Name	Units	Specifications	Test Value
Assay (unspecified)	%	28.0-30.0% NH_3	29.90
Appearance (Color)		Colorless	Colorless
Form		Liquid	Liquid
Residue on ignition	%	0.002%	0.0005
Impurity content	ppm	Cl 0.5ppm	0.2
Impurity content	%	CO_2 0.002%	0.0001
Impurity content	ppm	Fe 0.2ppm	<0.02
Impurity content	ppm	NO_3 2ppm	<1
Impurity content	ppm	PO_4 2ppm	<1
Impurity content		Substances reducing permanganate P.T.	Passes test
Impurity content	ppm	Sulfate (SO_4) 2ppm	<1
Trace Metals	ppm	(as Pb) 0.5ppm	<0.05

Derek Roy
Quality Manager, LCD

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.

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.