

Thermo Fisher Scientific Ward Hill, MA-Sites

 30 Bond Street
 220 Neck Road
 38 Shelley Road

 Ward Hill
 Ward Hill
 Ward Hill

 MA 01835
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## **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 Q16L001

Description Ammonium hydroxide, ACS, 28.0-30.0% NH<sub>3</sub>

CAS Number 1336-21-6
Quality Test/Release Date 16/Apr/2025
Suggested retest date 16/Apr/2028
Country of Origin United States

Result Name	Units	Specifications	Test Value
Assay (unspecified)	%	28.0-30.0% NH₃	29.88
Appearance (Color)		Colorless	Colorless
Form		Liquid	Liquid
Residue on ignition	%	0.002%	0.0005
Impurity content	ppm	CI 0.5ppm	<0.2
Impurity content	%	CO <sub>2</sub> 0.002%	0.0001
Impurity content	ppm	Fe 0.2ppm	<0.02
Impurity content	ppm	NO₃ 2ppm	<1
Impurity content	ppm	PO₄ 2ppm	<1
Impurity content		Substances reducing permanganate P.T.	Passes test
Impurity content	ppm	Sulfate (SO <sub>4</sub> ) 2ppm	<1
Trace Metals	ppm	(as Pb) 0.5ppm	<0.05

John Astarita

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John Astarita Director, Quality

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.