



# Certificate of Analysis



Material	VWRB191-100KG
Material description	Ammonium sulfate
Grade	NF/ACS/ENDOTOXIN TESTED
Lot	20B245205
Expiration Date	2024 Feb 20
CAS Number	7783-20-2
Molecular formula	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>
Molecular mass	132.14
Date of manufacture	2019 Feb 20
Made in	Czech Republic
Storage	Store between 15 °C and 30 °C.
Supplier	18140
Additional information	

Characteristics	Specifications	Measured values
Appearance	White crystalline powder	White crystalline powder
ACS specifications:	.	.
Assay [ACS]	Min. 99.0 %	100.2 %
pH (25°C; 5 %) [ACS]	5.0 --> 6.0	5.2
Heavy metals (ICP-OES) [ACS]	Max. 5 ppm	Max. 5 ppm
Insoluble matter [ACS]	Max. 0.005 %	Max. 0.005 %
Residue after ignition [ACS]	Max. 0.005 %	Max. 0.005 %
Cl (Chloride) [ACS]	Max. 5 ppm	Max. 5 ppm
NO <sub>3</sub> (Nitrate) [ACS]	Max. 0.001 %	Max. 0.001 %
PO <sub>4</sub> (Phosphate) [ACS]	Max. 5 ppm	Max. 5 ppm
Fe (Iron) [ACS]	Max. 5 ppm	Max. 5 ppm
NF specifications:	.	.
Assay [NF]	99.0 --> 100.5 %	100.2 %
Identification A	Passes test NF	Passes test NF
Identification B	Passes test NF	Passes test NF
pH [NF]	5.0 --> 6.0	5.2
Limit of insoluble matter [NF]	Max. 0.005 %	Max. 0.005 %
Residue on ignition [NF]	Max. 0.005 %	Max. 0.005 %
Cl (Chloride) [NF]	Max. 5 ppm	Max. 5 ppm
Limit of nitrate [NF]	Max. 10 ppm	Max. 10 ppm
Limit of phosphate [NF]	Max. 5 ppm	Max. 5 ppm
Fe (Iron) [NF]	Max. 5 ppm	Max. 5 ppm
Bacterial endotoxins	Max. 2.5 EU/g	Passes test
Total aerobic microbial count [NF]	Max. 1000 CFU/g	Passes test
Total combined yeasts and molds [NF]	Max. 10 CFU/g	Passes test

**For further manufacturing use only. Not for use as an Active Pharmaceutical Ingredient.**



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## Signature

We certify that this batch conforms to the specifications listed above.

This document has been produced electronically and is valid without a signature.

Naresh Boddu, Head of Laboratory - Aurora  
VWR Chemicals, LLC, 220 Lena Dr., Aurora, OH 44202, USA

## Additional information

No Class 1, 2, 3 or other residual solvents are present.

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