

Ammonium Chloride, Crystal  
AR® (ACS)



Material No.: 3384-12  
Batch No.: 0000060281  
Manufactured Date: 2011/10/27  
Retest Date: 2016/10/25

## Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
ACS - Assay (NH <sub>4</sub> Cl) (by Ag titrn)	>= 99.5 %	99.8
ACS - Calcium (Ca)	<= 0.001 %	< 0.001
ACS - Insoluble Matter	<= 0.005 %	< 0.001
ACS - Iron (Fe)	<= 2 ppm	< 1
ACS - Magnesium (Mg)	<= 5 ppm	1
ACS - pH of 5% Solution at 25°C	4.5 - 5.5	5.0
ACS - Phosphate (PO <sub>4</sub> )	<= 2 ppm	< 1
ACS - Residue after Ignition	<= 0.01 %	< 0.01
ACS - Sulfate (SO <sub>4</sub> )	<= 0.002 %	< 0.002
ACS - Appearance (white crystals)	Passes Test	PT
Heavy Metals (as Pb)	<= 2 ppm	< 2
Nitrate (NO <sub>3</sub> )	<= 5 ppm	< 5

For Laboratory, Research or Manufacturing Use

Country of Origin: MX



Phillipsburg, NJ 9001:2008, 14001:2004  
Paris, KY 9001:2008  
Mexico City, Mexico 9001:2008  
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003  
Gliwice, Poland 9001:2008, 17025:2005  
Selangor, Malaysia 9001:2008  
Dehradun, India, 9001:2008, 14001:2004, 13485:2003  
Mumbai, India, 9001:2008, 17025:2005  
Panoli, India 9001:2008

Richard M Siberski  
Global Director of Quality Assurance

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600  
Avantor™ Performance Materials Inc.

3477 Corporate Parkway, Suite #200, Center Valley, PA 18034, U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610