



Revision Date 08-Jan-2016

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

<u>Product Identifier</u> Product Name	Ammonium Chloride
Other means of identification Product Code(s)	0621
Synonyms	No information available
Recommended use of the chemical	and restrictions on use
Recommended Use	For Further Manufacturing Use Only.
Uses advised against	Not for Human or Animal Drug Use
Details of the supplier of the safety	
Company Address	Manufacturer Address
VWR International, LLC	VWR International, LLC
Radnor Corporate Center	28600 Fountain Parkway
100 Matsonford Road	Solon, Ohio 44139
Radnor, PA 19087-8660	
Company Phone Number	1-800-448-4442
E-mail Address	info@amresco-inc.com
Emergency Telephone Number Emergency Telephone Number	Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral	Category 4
Serious Eye Damage/Eye Irritation	Category 2

Label elements

	Emergency Overview	
Warning		
Hazard statements H302 - Harmful if swallowed H319 - Causes serious eye irritation		
Appearance White	Physical State Granular Powder	Odor No information available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not regulated

Other Information

Unknown Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Ammonium chloride	12125-02-9	235-186-4	95-100	Not applicable

4. FIRST AID MEASURES

First Aid Measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Inhalation	Move to fresh air. If not breathing, give artificial respiration.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

No information available.

Hazardous Combustion Hydrogen Chloride gas. Ammonia. Products

Explosion Data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures			
Personal protection	Ensure adequate ventilation, especially in confined areas.		
Environmental Precautions			
Environmental Precautions	Environmental Precautions See Section 12 for additional Ecological information.		
Methods and material for containment and cleaning up			
Methods for Containment Prevent further leakage or spillage if safe to do so.			
Methods for Cleaning UpAvoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.			

7. HANDLING AND STORAGE

Precautions for Safe Handling

HandlingHandle in accordance with good industrial hygiene and safety practice. Hygroscopic.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Hygroscopic.

Incompatible Products Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	
Ammonium chloride	20 mg/m ³ STEL (fume)	-	TWA: 10 mg/m ³	
12125-02-9	TWA: 10 mg/m ³		STEL: 20 mg/m ³	
Appropriate engineering control	ls			
Engineering Measures	Showers Eyewash stations Ventilation systems.			
Individual protection measures,	such as personal protective	equipment		
Eye/Face Protection	Avoid contact with eyes. S	Avoid contact with eyes. Safety glasses with side-shields.		
Skin and Body Protection	Wear protective gloves/clo	Wear protective gloves/clothing.		
Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.				
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.			

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Granular Powder					
Appearance	White	Odor	No information available			
Color	No information available	Odor Threshold	No information available			
Property_	Values_	Remarks • Method				
рН	(1% in water) 5.5					
Melting point/freezing point						
Boiling Point/Range	520 °C					
Flash Point (High in °C)	No information available					
Evaporation Rate	No information available					
Flammability (solid, gas)	No information available					
Flammability Limit in Air						
Upper flammability limit:	No information available					
Lower flammability limit:	No information available					
Vapor pressure	No information available					
Vapor Density	No information available					
Specific Gravity	1.53					
Water Solubility	Appreciable					
Solubility in other solvents	No information available					
Partition coefficient	No information available					
Autoignition Temperature	No information available					
Decomposition Temperature	No information available					
Kinematic viscosity	No information available					
Dynamic viscosity	No information available					
Explosive Properties	No information available					
Oxidizing Properties	No information available					
Other Information						
Softening Point	No information available					
Molecular Weight	No information available					
VOC Content	No information available					
Density	1.9					
Bulk Density	No information available					
	10. STABILITY AND REACTIVITY					

<u>Reactivity</u> No data available

<u>Chemical Stability</u> Stable under recommended storage conditions. <u>Possibility of Hazardous Reactions</u> None under normal processing. <u>Conditions to Avoid</u> Protect from moisture. <u>Incompatible Materials</u> Strong acids. Strong bases. <u>Hazardous Decomposition Products</u> Hydrogen chloride gas. Ammonia.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Causes skin, eye and respiratory tract irritation Toxic if swallowed
Inhalation	There is no data available for this product.
Eye Contact	There is no data available for this product.

Skin Contact

There is no data available for this product.

Ingestion

There is no data available for this product.

Chemical Name LD50 Oral		LD50 Dermal	LC50 Inhalation
Ammonium chloride	= 1650 mg/kg (Rat)	-	-
12125-02-9			

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Mutagenic Effects Carcinogenicity	No informati	No information available. No information available. No information available.		
Chemical Name	ACGIH	IARC	NTP	OSHA
Ammonium chloride 12125-02-9	-	-	-	-
Reproductive Toxicity STOT - single exposure STOT - repeated exposure Target Organ Effects Aspiration hazard	No informati No informati Liver, Kidne	No information available. No information available. No information available. Liver, Kidneys, Lungs. No information available.		

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name Algae/aquatic plants		Toxicity to Fish	Crustacea	
Ammonium chloride 12125-02-9	-	209: 96 h Cyprinus carpio mg/L LC50 static 725: 24 h Lepomis	202: 24 h Daphnia magna mg/L LC50	
		macrochirus mg/L LC50		

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
Ammonium chloride 12125-02-9	-

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method	Dispose of material in accordance with all federal, state, and local regulations.
-----------------------	---

Contaminated Packaging Do not re-use empty containers.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Ser	ies Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Ammonium chloride 12125-02-9	-	-		-	-
Chemical Name California Hazardous Waste Status Ammonium chloride 12125-02-9					
	14. TRANSPORT INFORMATION				

Not regulated

DOT	Not regulate

IATA	Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values %
Ammonium chloride	1.0
12125-02-9 (95-100)	

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ammonium chloride	5000 lb	-	-	Х

12125-02-9	

<u>CERCLA</u>

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Ammonium chloride	5000 lb	-	RQ 5000 lb final RQ
12125-02-9			RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Ammonium chloride - 12125-02-9	-

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ammonium chloride	X	X	Х
12125-02-9			

U.S. EPA Label Information

EPA Pesticide Registration Number Not regulated

16. OTHER INFORMATION

03-Mar-2010 08-Jan-2016

Issuing Date
Revision Date
Revision Note
No information available
<u>Disclaimer</u>

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

End of Safety Data Sheet