

SAFETY DATA SHEET

Issuing Date 23-Jul-2012 Revision Date 09-Feb-2015

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name AMMONIUM CHLORIDE

Other means of identification

Product Code(s) BDH9208-2KG: BDH9208-500G

Synonyms No information available.

Recommended use of the chemical and restrictions on use

Recommended Use For Laboratory Use Only. Not for Drug, Food, or Household use.

Uses advised against Not for Human or Animal Drug Use

Details of the supplier of the safety data sheet

Company Address

VWR International, LLC Radnor Corporate Center 100 Matsonford Road Radnor, PA 19087-8660

Company Phone Number E-mail Address 610-386-1700 www.vwr.com

Emergency Telephone Number

Emergency Telephone Number

CHEMTREC 800.424.9300 CANUTEC 613.996.6666

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

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P330 - Rinse mouth

P337 + P313 - If eye irritation persists: Get medical advice/attention

P501 - Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

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 Precautions Ensure adequate ventilation, especially in confined areas.

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 Up Avoid 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

Handling Handle 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

Exposure Guidelines

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 controls

Engineering Measures Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes. Safety glasses with side-shields.

Skin and Body Protection 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

AppearanceWhiteOdorNo information availableColorNo information availableOdor ThresholdNo information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH (1% in water) 5.5

Melting point/freezing point

Boiling Point/Range 520 °C

Flash Point (High in °C)

Evaporation Rate

Flammability (solid, gas)

No information available

No information available

No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor Density

No information available.
No information available.
No information available.
No information available.

Specific Gravity 1.53
Water Solubility Appreciable

Solubility in other solvents

Partition coefficient

No information available.

No information available

Autoignition Temperature

Decomposition TemperatureNo information availableKinematic viscosityNo information availableDynamic viscosityNo information availableExplosive PropertiesNo information availableOxidizing PropertiesNo information available

Other Information

Softening PointNo information available.Molecular WeightNo information availableVOC ContentNo information available.

Density 1.9

Bulk Density No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Protect from moisture.

Incompatible Materials

Strong acids. Strong bases.

Hazardous Decomposition Products

Hydrogen chloride gas. Ammonia.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Toxic if swallowed Irritating to eye, skin and respiratory system

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

SensitizationNo information available.Mutagenic EffectsNo information available.CarcinogenicityNo 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 information available.
No information available.
Liver, Kidneys, Lungs.
No information available.

Numerical measures of toxicity - Product Information

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	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Ammonium chloride 12125-02-9	<u>-</u>	209: 96 h Cyprinus carpio mg/L LC50 static 725: 24 h Lepomis macrochirus mg/L LC50	202: 24 h Daphnia magna mg/L LC50

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Log Pow
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 Series 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

DOTNot regulatedIATANot regulated

15. REGULATORY INFORMATION

International Inventories

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

Leaend:

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

 $\textbf{DSL/NDSL} \ - \ Canadian \ Domestic \ Substances \ List/Non-Domestic \ Substances \ List$

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	-	-	X
12125-02-9				

CERCLA

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 12125-02-9	5000 lb	-	RQ 5000 lb final RQ 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	Х	X	X
12125-02-9			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Canada

WHMIS Hazard Class

D2B Toxic materials



16. OTHER INFORMATION

Issuing Date 23-Jul-2012

Revision Date 09-Feb-2015

Revision Date Revision Note No information available 09-Feb-2015

Disclaimer

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 regerd 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