

## AMMONIUM CHLORIDE

### SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: AMMONIUM CHLORIDE  
Product Code: CM 23043  
CAS#: 12125-02-9  
Synonym: Salmiac  
Chemical Name: Not available  
Chemical Formula:  $\text{NH}_4\text{Cl}$   
Formula weight: 53.49

### SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Composition:  
Name: Ammonium chloride  
Toxicological Data on Ingredients: Acute Tox. 4; Eye Irrit. 2; H302, H319

### SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture  
Eye irritation (Category 2), H319  
Potential Acute Health Effects:  
Acute toxicity, Oral (Category 4), H302  
Potential Chronic Health Effects : Not Available  
Carcinogenic Effects: Not available  
Mutagenic Effects: Not available.  
Teratogenic Effects: Not available.  
Developmental Toxicity: Not Available  
Specific target organ toxicity - Not available

### SECTION 4: FIRST AID MEASURES

Description of first aid measures  
General advice Consult a physician. Show this safety data sheet to the doctor in attendance.  
If inhaled If breathed in: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.  
In case of skin contact Wash off with soap and plenty of water. Consult a physician.  
In case of eye contact: Flush eyes with water as a precaution.  
If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.  
Most important symptoms and effects, both acute and delay: No data available  
Indication of any immediate medical attention and special treatment needed: No data available

### SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media  
Suitable extinguishing media :  
Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Special hazards arising from the substance or mixture  
Sulfur oxides  
Zinc/zinc oxides



Not combustible.  
Ambient fire may liberate hazardous vapours.  
Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.  
Environmental precautions Do not let product enter drains.  
Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers.

#### SECTION 7: HANDLING AND STORAGE

Precautions for safe handling : Not available  
Conditions for safe storage, including any incompatibilities  
Tightly closed. Dry.  
Storage Class:  
Storage class (TRGS 510): 13: Non Combustible Solids  
Specific end use(s) A part from the uses:  
No other specific uses are stipulated.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls  
Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.  
Personal protective equipment  
Eye/face protection Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).  
Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.  
Body Protection Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.  
Respiratory protection For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).  
Control of environmental exposure Do not let product enter drains.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form	: Solid
Colour	: White
Odour	: Not available
Odour Threshold	: Not available
pH	: Not available
Melting point/freezing point	: 520°C
Initial boiling point and boiling range	: Not available
Flash point	: Not available
Evaporation rate	: Not available
Flammability (solid, gas)	: The product is not flammable. :
Upper/lower flammability or explosive limits	Not available



Vapour pressure	: Not available
Vapour density	: Not available
Relative density	: Not available
Water solubility	: Not available
Partition coefficient	: Not available
Auto-ignition temperature	: Not available

#### SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity no data available

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions

Violent reactions possible with:

alkali hydroxides

acids

Risk of ignition or formation of inflammable gases or vapours with:

halogen-halogen compounds

alkalines

alkaline substances

Risk of explosion with:

nitrates

chlorates

Heavy metal salts

Conditions to avoid :

Not available.

Incompatible materials

Aluminum, Lead, Iron, Copper, copper compounds

Hazardous decomposition products Other decomposition products - In the event of fire

#### SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity:

LD50 Oral - Rat - male and female - 1.410 mg/kg

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Symptoms: Possible damages:, mucosal irritations

LD50 Dermal - Rat - male and female - > 2.000 mg/kg

Skin corrosion/irritation no data available

Serious eye damage/eye irritation : Eye irritation (Category 2), H319

Respiratory or skin sensitization no data available

Carcinogenicity no data available

#### SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Toxicity to fish semi-static test LC50 - Cyprinus carpio (Carp) - 209,00 mg/l - 96 h

Toxicity to daphnia and other aquatic static test EC50 - Daphnia magna (Water flea) - 101 mg/l - 48 h

invertebrates

Toxicity to algae static test ErC50 - Chlorella vulgaris (Fresh water algae) - 1.300 mg/l- 5 d

Toxicity to bacteria static test EC50 - activated sludge - 1.310 mg/l – 0.5 h



Persistence and degradability:  
Not Available  
Bioaccumulative potential :Not available  
Mobility in soil no data available  
Results of PBT and vPvB assessment PBT/vPvB assessment not available  
Other adverse affects no data available

#### SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.  
Contaminated packaging Dispose of as unused product.

#### SECTION 14: TRANSPORT INFORMATION

UN number:		
ADR/RID:	IMDG:	IATA:
UN proper shipping name		
ADR/RID: Not dangerous goods		
IMDG: Not dangerous goods		
IATA: Not dangerous goods		
Transport hazard class(es):		
ADR/RID:	IMDG:	IATA:
Packaging group:		
ADR/RID:	IMDG:	IATA:
Environmental hazards:		
ADR/RID: No	IMDG Marine pollutant: No	IATA: Yes

#### SECTION 15: OTHER REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture  
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Other regulations  
Take note of Dir 94/33/EC on the protection of young people at work.

#### SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements.  
Acute toxicity, Oral (Category 4), H302  
Eye irritation (Category 2), H319  
Special Considerations: Not available

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