**MATERIAL SAFETY DATA SHEET** 

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# **AMMONIUM CHLORIDE**

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: AMMONIUM CHLORIDE Product Code: 242 CAS#: 12125-02-9 Synonym: Salmiac Chemical Name: Not available Chemical Formula: NH<sub>4</sub>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 (CO2) 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



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

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# **MATERIAL SAFETY DATA SHEET**

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	
SEC	FION 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		
SEC	TION 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 Toxicity to daphnia and other aquatic invertebrates Toxicity to algae Toxicity to bacteria semi-static test LC50 - Cyprinus carpio (Carp) - 209,00 mg/l - 96 h static test EC50 - Daphnia magna (Water flea) - 101 mg/l - 48 h

static test ErC50 - Chlorella vulgaris (Fresh water algae) - 1.300 mg/l- 5 d static test EC50 - activated sludge - 1.310 mg/l – 0.5 h

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**MATERIAL SAFETY DATA SHEET** 

### 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

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.

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