



Material Safety Data Sheet

DS12125029

1. Identification

Identification of the product

Catalogue No: **0018/1; 0018/100; 0018/500; 0019/1; 0019/5; AM045; AM046**
Product name: **Ammonium chloride**
Synonyms: Ammonium Chloratum, Ammonium Chloridum, Ammonium Muriate, Sal Ammonia, Salmiac

Manufacturer/supplier identification

Company: Scientific & Chemical Supplies Limited
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2. Composition/information on ingredients

Chemical classification

Inorganic salt
CAS number: 12125-02-9 EC-No.: 235-186-4

3. Hazards identification

Harmful if swallowed. Irritating to eyes.

4. First aid measures

- Eye contact: Irrigate thoroughly with water for at least 10 minutes. If discomfort persists obtain medical attention.
- Inhalation: Remove from exposure, rest and keep warm. In severe cases obtain medical attention.
- Skin contact: Wash off skin thoroughly with water. Remove contaminated clothing and wash before re-use. In severe cases, OBTAIN MEDICAL ATTENTION.
- Ingestion: Wash out mouth thoroughly with water and give plenty of water to drink. OBTAIN MEDICAL ATTENTION.

5. Fire-fighting measures

Special risks:

May evolve toxic fumes in fire.

Suitable extinguishing media:

To suit environment.

6. Accidental release measures

Wear appropriate protective clothing.

Mix with dry sand, transfer carefully to container and arrange removal by disposal company. Wash site of spillage thoroughly with detergent and water.

For large spillages liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residues should be treated as for small spillages.

7. Handling and storage

Handling:

Avoid generation of dusts. Change contaminated clothing. Wash hands after working with substance.

Storage:

Store at room temperature (15 to 25°C recommended). Keep well closed and protected from direct sunlight and moisture.

8. Exposure controls/personal protection

As appropriate to the situation and the quantity handled.

- Respirator: Dust respirator
- Ventilation: Extraction hood
- Gloves: Rubber or plastic
- Eye Protection: Goggles or face-shield
- Other Precautions: Plastic apron, sleeves, boots - if handling large quantities

See section 15 for UK exposure limits.

9. Physical and chemical properties

Physical State:	Solid
Appearance:	Colourless or white
Odour:	Odourless
pH:	5.0 (10% soln at 25°C)
Vapour Pressure:	1 mm Hg @ 160°C
Boiling Point:	520°C
Freezing/Melting Point:	Sublimes 335°C
Solubility in water:	370 g/l @ 20°C
Specific Gravity/Density:	1.53 (Water = 1)
Molecular Formula:	NH ₄ Cl
Molecular Weight:	53.49

10. Stability and reactivity

Hygroscopic.

Unsuitable working materials: Copper.

Conditions to be avoided : Strong heating.

Substances to be avoided : Alkali hydroxides, chlorine, chlorates, nitrates, nitrites, halogen-halogen compounds.

The possibility of reaction with other substances cannot be excluded.

Hazardous decomposition products : Ammonia, hydrochloric acid.

11. Toxicological information

- After inhalation: Irritation of the mucous membranes, coughing, and dyspnoea.
- After skin contact: slight irritation symptoms.
- After eye contact: irritant effect.
- After ingestion: Irritation of mucous membranes in the mouth, pharynx, oesophagus, and gastrointestinal tract. After ingestion of large amounts: headache, nausea, unconsciousness.

Further data

LD50 1650 mg/kg oral, rat.

The following applies to ammonium salts in general: after swallowing, local irritation symptoms, nausea, vomiting, diarrhea.

Systemic effect: after the uptake of very large quantities: drop in blood pressure, collapse, CNS disorders, spasms, narcotic conditions, respiratory paralysis, haemolysis.

No evidence of carcinogenic properties. No evidence of mutagenic or teratogenic effects.

12. Ecological information

Adverse ecological effects cannot be excluded in the event of improper handling or disposal.

Further data:

Bioaccumulation potential: Low (Log Pow <2)

The following applies to ammonium ions in general: biological effects: fish: toxic from 0.3 mg/l up; plankton: toxic from 0.3 mg/l up.

Do not allow to enter drinking water supplies, waste water or soil.

13. Disposal considerations

Chemical residues are generally classified as special waste, and as such are covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company. Rinse out empty containers thoroughly before returning for recycling.

14. Transport information

UN-No.: Not regulated

IMDG class:

IMO:

Packaging group:

IATA:

Packaging group:

Correct technical name:

ADR/RID:

15. Regulatory information

Labelling according to EC directives

Symbol: Xn Harmful.



R-phrases: R22-36

Harmful if swallowed. Irritating to eyes.

S-phrases: S22

Do not breathe dust.

EC-No.: 235-186-4

Local Regulations

Within the UK, the use of this material must be assessed under the Control of Substances Hazardous to Health (COSHH) regulations.

UK Exposure Limits: WEL, Ammonium chloride, fume:

Long-term: 10 mg/m³ Short term: 20 mg/m³

16. Other information

Date of issue: 10 May 2007

Important Statement

The information above is believed to be accurate and represents the best information currently available from multiple crosschecked sources.

However, we make no warranty express or implied, with respect to such information, and we assume no liability resulting from its use.

Users should make their own investigations to determine the suitability of the information for their particular purposes.

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