



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

| | |
|----------------------|---|
| Product | Ammonium Sulphate |
| Usage | Fertiliser/ Plant nutrient |
| Supplier | Westland Horticulture Ltd 14 Granville Industrial Estate Granville Road Dungannon County Tyrone BT70 1NJ |
| Email | customerservice@WestlandHorticulture.com |
| Emergency Tel | 01480 443789 (UK) |

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture According to Regulation (EC) No 1272/2008:

Not classified

Classification of the Substance or Mixture According to Directive 67/548/EEC or Directive 1999/45/EC:

Not classified

Label Elements According to Regulation (EC) No 1272/2008:

| | |
|--------------------------|----------------|
| Hazard Pictograms | None |
| Signal Word | None |
| Hazard Statements | Not applicable |
| Precautionary Statements | Not applicable |
| Other hazards | Not applicable |



3. COMPOSITION/INFORMATION ON INGREDIENTS

Description

Substance

Ammonium Sulphate ((NH₄)₂SO₄) is not classified as a hazardous substance (CAS 7783-20-2; EC 231-984-1)

4. FIRST AID MEASURES

General Advice: Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or physician, or going for treatment.

Inhalation: Move person to fresh air.
Keep patient warm and at rest.

Skin Contact: Wash off with soap and plenty of water.
Get medical advice if irritation or rash occurs

Eye Contact: Rinse cautiously with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses and continue flushing.

Ingestion: Rinse out mouth with water
Do Not induce vomiting
Get medical attention if symptoms occur

Most important symptoms and effects: Not applicable

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Suitable extinguishing media for the surrounding fire should be used

Extinguishing Media Which Must Not Be Used For Safety Reasons:

Do not use water jet

Specific Hazards Arising From the Substance or Mixture:

Fire will produce toxic and corrosive products of combustion such as Sulphur Dioxide (SO₂)
Exposure to decomposition products may be a hazard to health

Special Protective Equipment for Fire Fighters:

Wear full protective clothing and self-contained respiratory apparatus.

Further Information: None



6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid formation / breathing of dust

Ensure suitable personal protection (including respiratory protection) during removal of spillages

Environmental Precautions:

Avoid release to the environment

Do not allow to enter surface or ground water or sanitary sewer system.

Methods and Materials for Containment and Cleaning Up:

Sweep up and shovel into suitable containers (waste drums or plastic bags) for disposal according to local / national regulations

Dispose contaminated material as waste according to Section 13

Wash the spillage area with water

Additional Advice: If large quantities of the product contaminates water courses or drains (including via contaminated soil & vegetation), inform respective authorities.

Reference to other sections:

See section 7 for information on safe handling

See Section 8 for information on personal protection equipment

See Section 13 for disposal information

7. HANDLING AND STORAGE

Handling:

- Prevent dust formation and inhalation
- Avoid contact with eyes and skin
- Do not eat, drink or smoke when using this product
- Wash hands and observe good hygiene practice after handling this product

Storage:

- Keep containers closed tightly in a dry, cool and well-ventilated place.
- Keep away from oxidizing agents, alkalis, chlorates, nitrates and nitrites
- Protect against fire and explosion
- Keep away from food and feedstuffs

Specific End Uses:

Use as fertiliser according to the instruction on the label



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

No ingredients with limit values that require monitoring at the workplace

| Ingredient | Work Exposure Limit (WEL) | |
|------------|--|---|
| | Long-term Exposure Limit (8-hr TWA reference period) Total Inhalable | Long-term Exposure Limit (8-hr TWA reference period) Respirable |
| Dust | 10 mg/m ³ | 4 mg/m ³ |

Exposure Controls

Engineering Measures: Avoid high dust concentration and provide ventilation where necessary to ensure that the occupational exposure limit is not exceeded

Protective Measures: The use of technical measures should always have priority over the use of personal protective equipment
When selecting personal protective equipment, seek appropriate professional advice
Personal protective equipment should be certified to appropriate standards

Respiratory Protection: Use suitable dust mask with filter type P1 if dust concentration is high

Hand Protection: Wear good resistance protective gloves.
Material of gloves: PVC

Eye Protection: Wear safety glasses. Wear protective goggles if dust concentration is high

Skin and Body Protection: Protecting work clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White crystalline solid

Odour: Odourless

Other Properties:

| | Value | Temperature | Method |
|---------------------------|-----------------|-------------|--------|
| pH (100g/l) | ~5 | | |
| Bulk density | 1.0 – 1.12 g/ml | | |
| Decomposition temperature | >235 °C | | |
| Solubility in water | 754g /l | 20 °C | |



10. STABILITY AND REACTIVITY

- Chemical Stability:** Stable under normal conditions of storage, handling and use
- Hazardous Reactions:** Reacts with alkalis to liberate ammonia
Can produce thermally sensitive mixtures with potassium chlorate and potassium nitrate and can enhance explosive properties of ammonium nitrate
Dangerous reactions with nitrates
- Hazardous Decomposition:** Heating or fire can release toxic or irritant vapours (Sulphur oxides and ammonia)
- Conditions To Avoid:** Keep away from heat
- Incompatible Materials:** Strong oxidising agents, alkalis, chlorates, nitrates and nitrites

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Ingestion may cause irritation of the gastrointestinal tract

Skin Irritation: Repeated or prolonged skin contact may result in mild irritation

Serious Eye Irritation: Dust may cause irritation. Permanent damage is unlikely

Respiratory or Skin Sensitization: High concentration of dust may be irritant to the respiratory tract

STOT- repeated exposure: This material has been in used for many years with no evidence of adverse effects

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not harmful to aquatic organisms

Persistence and Degradability: Ammonium sulphate is mineralised fairly rapidly in unsterilized soil and subsequently nitrified. Nitrification and de-nitrification processes also occur naturally in streams, rivers and sewage treatment plants

Bioaccumulative Potential: Not expected to adsorb or bioaccumulate based on high water solubility and ionic nature of the substance

Mobility in Soil: May be reduced through ion-ion interactions

PBT and vPvB assessment: Not classified as PBT or vPvB

Other Data: Inorganic product which cannot be eliminated from water by biological purification processes. Ammonium ion NH_4^+ can oxidise to nitrate or be reduced to nitrogen by microorganisms.



13. DISPOSAL CONSIDERATIONS

- Product:** Do not contaminate ponds, waterways or ditches with product or used container. Check if agriculture use is possible. Dispose of by use on farm as a fertiliser, by spreading thinly on open ground
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.
- Contaminated Packaging:** Empty remaining contents.
Completely empty containers can be put in the bin or disposed of in compliance with applicable local regulations

14. TRANSPORT INFORMATION

- Land Transport (ADR /RID)** Not dangerous goods
- Maritime Transport (IMDG)** Not dangerous goods
- Air Transport (IATA-DGR)** Not dangerous goods

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance of mixture:

This mixture is classified in accordance with Directive 1999/45/EC, regulation 1272/2008 and the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations

The mixture is also regulated by the following legislation:

EC Directives: 76/116/EEC (Relating to fertilisers)

National Regulations: The Fertilisers Regulations 1991 and subsequent amendments

Chemical Safety Assessment: A Chemical Safety Assessment has not been carried out



16. OTHER INFORMATION

Recommended uses and restrictions: Follow the instructions

Abbreviations and Acronyms

| | |
|------------------------------|--|
| ADR | International Carriage of Dangerous Goods by Road |
| bw | By weight |
| CAS No | Chemicals Abstract Service Registry Number |
| EC No | European Community Number for chemicals within EU regulations |
| EC50 | Half Maximal Effective Concentration |
| IATA-DGR | Dangerous Goods Regulations by the International Air Transport Association |
| IMDG Code | International Maritime Dangerous Goods Code |
| NOEC | No Observed Effect Concentration |
| OECD | Organisation for Economic Cooperation and Development |
| PBT | Persistent, Bioaccumulative and Toxic Properties |
| Regulation (EC) No 1272/2008 | Classification, Labelling and Packaging |
| RID | International Transport of Dangerous Goods by Rail |
| vPvB | Very Persistent and Very Bioaccumulative Properties |

Further information

Before using this product, ensure that you read and understand its label

MSDS information:

This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, 1272/2008 and Annex I of the REACH regulation 453/2010.

This safety data sheet provides health and safety information. This product is to be used in applications with best use practice. Individuals handling this product should be informed under COSHH of the recommended safety precautions and should have access to this information. The product information in this data sheet is to the best of our knowledge correct as at the date of publication. Westland Horticulture Limited does not accept responsibility for damage caused by incorrect use of this information.

Training and related advice:

This document contains important information to ensure the safe storage, handling and use of this product. It is the responsibility of your organisation to ensure that the information contained in this document is communicated to the end user and that all necessary training to enable the product to be used correctly has been given.

For further information please contact Westland Horticulture Ltd, 14 Granville Industrial Estate, Granville Road, Dungannon, County Tyrone, BT70 1NJ.