



MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Commercial product name:	J Arthur Bower's Sulphate of Ammonia Nitrogen Plant Food
Description	Granular plant food to provide a fast-acting source of nitrogen to promote strong growth in green leaf crops
Manufacturer	NPK: 21-0-0 William Sinclair Horticulture Firth Road Lincoln LN6 7AH Tel: (01522) 537561 Fax: (01522) 780278

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterisation of active component: Granules composed of ammonium sulphate plus sand

3. HAZARDS IDENTIFICATION

Classified as Non Hazardous Material

3.1 Human Health

Dust is the main hazard to human health.
Large bags should be lifted with care.
Molten material will cause burns and inhalation of decomposition gases (e.g. in a fire) may cause serious lung effects

3.2 Environment

Heavy spillage may cause adverse environmental impact. See section 12.

4. FIRST AID MEASURES

Skin contact:	Wash hands after use. Wash from cuts and abrasions with soap and water
Eye contact:	Wash affected eyes for at least 15 minutes under running water. Consult eye specialist
Ingestion:	Rinse mouth and drink plenty of water. Do not induce vomiting.
Inhalation:	Move into fresh air and seek medical attention

If symptoms persist seek medical advice.

5. FIREFIGHTING MEASURES

When the fertiliser **is not** directly involved in the fire use the best means available to control the fire.

When the fertiliser **is** involved:-

1. Avoid breathing the fumes. Wherever possible wear an approved breathing mask when fighting a fire or when fumes are being emitted.
2. Call the fire brigade
3. Use plenty of water
4. Open doors and windows to give maximum ventilation
5. Do not allow molten product to run into drains.

6. ACCIDENTAL RELEASE MEASURES

Do not let material enter drains. Sweep up into suitable container and wash affected areas with water.

7. HANDLING AND STORAGE

Keep away from sources of heat, fire or explosion and away from all combustible materials and chemical substances. All materials should be handled using good working practices. Do not permit smoking or the use of naked lights in the storage area. Store in a cool, dry place away from children and pets.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

S26: *In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.*

8.1 Occupational Exposure Limits

No specific official limits.

ACGIH recommended value (1995-1996) for inhalable particulate: TLV/TWA 10mg/m³

8.2 Precautionary and engineering measures

Avoid high dust concentration and provide ventilation where necessary

8.3 Personal Protection

Wear suitable gloves when handling the product over long periods. Use approved dust respirators if airborne concentrations are high. Wash hands after handling the product and observe good hygiene practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off white/yellow crystalline powder
Odour:	None detectable
Melting Point:	350°C
Starts to decompose:	235°C
Solubility in water:	Soluble
PH water solution (100g/l)	4 – 6

10. STABILITY AND REACTIVITY

Stable under normal storage and handling conditions. Liberates ammonia when in contact with alkalis e.g. Caustic Soda. Hazardous reaction with nitrates

Do not apply heat to equipment that may have contained the fertiliser without first washing thoroughly to remove all fertiliser.

Can decompose at temperatures above 235°C

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD50/oral/rat: 4250mg/kg

Prolonged exposure to the product (dust) can result in irritation of the skin and mucous membranes

12. ECOLOGICAL INFORMATION

12.1 Mobility

Nutrients soluble in water. The ammonium ion is adsorbed by soil.

12.2 Persistence/Degradability

The ammonium ion is adsorbed by soil particles.

12.3 Bio-accumulation

The product does not show any bio-accumulation phenomena

12.4 Ecotoxicity

Toxicity to fish: DIN 38412 –15

Leuciscus idus: EC/LCO(96h): 460mg/l

13. DISPOSAL CONSIDERATIONS

Must be disposed of by landfill or incineration at a suitably licensed premises, in compliance with the Environmental Protection Act 1990 and the Environmental Protection Regulations (Duty of Care) 1991 (S12839).

14. TRANSPORT INFORMATION

Classified as non-hazardous under transport regulations

15. REGULATORY INFORMATION

15.1 EC Directives

76/116/EEC (Relating to fertilisers)

15.2 National Regulations

The Fertilisers Regulations 1991 and subsequent amendments

16. OTHER INFORMATION

This safety data sheet provides health and safety information. The product is to be used in a way consistent with best horticultural 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 at the date of publication. William Sinclair Horticulture disclaims any liability for any loss or damage resulting from reliance on this information.

Date of preparation: 31/01/02

Revised: 18/01/08