

**MATERIAL SAFETY DATA SHEET**

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

**Product:** J Arthur Bower's Lawn Food  
(Available in sacks and cartons)

**Supplier:** William Sinclair Horticulture  
Firth Road  
Lincoln  
Lincolnshire  
LN6 7AH

Tel: 0044 (0) 1522 537561  
Fax: 0044 (0) 1522 780278

**SOLID COMPOUND FERTILISER**

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Combined granular fertiliser NPK: 3-3-3 + 2% Iron

Contains the following ingredients:

Ammonium sulphate, potassium chloride, superphosphate and ferrous sulphate plus lignite.

**3. HAZARDS IDENTIFICATION**

3.1 Human Health

Products are of low toxicity but prolonged skin or eye contact may cause some irritation.

*Ingestion:* Small quantities are unlikely to cause toxic effects.  
Large quantities may give rise to gastro-intestinal disorders

*Inhalation:* Low toxicity dust but high concentration of air-borne material may cause Irritation of the nose and upper respiratory tract with symptoms such as sore throat and coughing.

*Molten material:* Will cause burns and inhalation of decomposition gases (e.g. in a fire) may cause serious delayed lung effects



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### HAZARDS IDENTIFICATION (CONT.)

#### 3.2 Environment

As this fertiliser contains phosphate, heavy spillage may cause adverse environmental impact such as eutrophication in confined surface waters. See section 12.

### 4. FIRST AID MEASURES

*Skin contact:* Wash the affected area with soap and water

*Eye contact:* Bathe the eye with running water or eyewash for 10 minutes.

*Ingestion:* Do not induce vomiting. Give milk or water to drink. Obtain medical attention if more than small quantities have been swallowed.

*Inhalation:* Move into fresh air.

#### FIRE AND THERMAL DECOMPOSITION PRODUCTS

*Skin contact:* Wash areas in contact with molten material using copious amounts of cold water. Seek medical advice.

*Inhalation:* Remove from source of exposure to fume. Keep warm and at rest.

#### Obtain medical advice if symptoms persist

### 5. FIRE FIGHTING 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:-

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

*Extinguishing Media:* Water jet, spray or dry powder

*Exposure Hazards:* In intense heat decomposition will release toxic fumes including ammonia and sulphur oxides.

*Protective Equipment:* Full breathing apparatus



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### 6. ACCIDENTAL RELEASE MEASURES

Sweep up carefully into suitable labelled container and store in a safe place awaiting disposal

*Precautions:* If spillage to enter drains or water courses immediately inform local Water Authority and Environmental Protection Agency

*Protective Equipment:* Overalls, impervious glove, rubber boots, face mask or goggles

### 7. HANDLING, STORAGE AND USE

*Handling:* Avoid excessive generation of dust. Avoid unnecessary exposure to the atmosphere to prevent moisture pick-up

*Storage :* The basic requirements are to avoid contamination and fire. Keep away from sources of heat, fire and explosion, and away from all combustible materials and chemical substances. **Do not permit smoking** or the use of naked lights in the storage area. Do not block stack pallets. Store in a cool, dry, well-ventilated place away from children and pets.  
Further storage guidance is given in HSE Guidance IND (G) 230L

*Use:* Use only as a home garden lawn treatment as directed on the pack

### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

#### 8.1 Occupational Exposure Limits

No specific official limits.

ACGIH recommended value (1995-1996) for inhalable particulate: TLV/TWA 10mg/m<sup>3</sup>

#### 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.



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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light brown granules  
Odour: Faint odour  
Bulk density: Normally between 900-1100kg/m<sup>3</sup>  
Solubility in water: Variable solubility, extent depends on composition  
Most formulations are hygroscopic

Analysis:

Nitrogen	6%
Phosphorus Pentoxide	5%
Potassium Oxide	10%
Ferrous Iron	2.5%

### 10. STABILITY AND REACTIVITY

*Stability:* Stable under normal conditions  
*Conditions to avoid:* High temperatures  
*Materials to avoid:* None specific  
*Hazardous decomposition Products* Product decomposition under intense heat may release toxic nitrogen and sulphur oxide fumes

### 11. TOXICOLOGICAL INFORMATION

Low toxicity  
*Acute toxicity:* >2000mg/kg  
*Irritancy skin* Non irritant though susceptible persons may have allergic reaction  
*Irritancy eyes* Slight irritant  
*Irritancy respiratory system:* Slight irritant  
*Chronic effects:* None known

### 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. Phosphates, whether water or citrate soluble, are translocated in the soil over very short distances, and are then immobilised.
- 12.3 Bio-accumulation  
The product does not show any bio-accumulation phenomena
- 12.4 Ecotoxicity  
Low toxicity to aquatic life



**13. DISPOSAL CONSIDERATIONS**

Dispose of to an authorised waste facility. Take care to avoid the contamination of watercourses and drains. Inform the appropriate water authority in the event of accidental watercourse contamination.

**14. TRANSPORT INFORMATION**

14.1 UN classification  
Classified as non-hazardous

**15. REGULATORY INFORMATION**

15.1 EU 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.