





Fire and Thermal Decomposition Products

Skin Contact: Wash areas in contact with molten material. Wash copiously with cold water. Seek medical advice.

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

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: -

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 the fertiliser or water containing the fertiliser to run into drains.

Note also First Aid precautions (Section 4).

6. ACCIDENTAL RELEASE MEASURES

Wash down spillage promptly and avoid ingestion by livestock. Take care to avoid the contamination of watercourses and drains. Inform the appropriate water authority in the event of accidental watercourse contamination.

7. HANDLING AND STORAGE

Handling: Avoid excessive generation of spray during transport of product. Take special care with absorbent materials such as clothing and insulating material contaminated with the fluid which, when dry, may exhibit incendiary properties.

Storage: Store in vessels fit for the purpose. Locate away from sources of heat, fire or explosion. Keep away from combustible materials and chemical substances taking particular care on farms to ensure that it is not stored near hay, grain, diesel etc. Ensure high standard of housekeeping in the storage areas. Tank or storage areas should be appropriately sited to prevent the contamination of drains or watercourses

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:	No specific official limits.
Precautionary/Engineering Measures:	Avoid high spray concentration and provide ventilation where necessary.
Personal Protection:	Wear suitable gloves when handling the product over long periods. Avoid contamination of absorbent clothing. After handling product, wash hands and observe good hygiene practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: Aqueous solution (clear) or suspension which will crystallize out at temperature below zero.  
Odour: Odourless or slight ammoniacal smell.  
pH: >4.5.  
Density: Depends on concentration. Normally 1200 kg/m<sup>3</sup>.

**10. STABILITY AND REACTIVITY**

Stable under normal storing and handling conditions. Liberates ammonia when in contact with alkalis e.g. Caustic Soda, Soda Ash.

The solution (and solids in solution) does not support combustion and may act as a fire retardant. When strongly heated, water evaporates and ammonia is given off. After complete evaporation, a solid or molten mass may form which decomposes on further heating, giving off toxic fumes containing ammonia, hydrogen chloride, ammonium chloride and chlorine and oxides of nitrogen if ammonium nitrate is present. There is no explosive risk under normal handling situations, but in pumping operations, if allowed to run dry, may possibly exhibit explosive properties.

Do not weld or apply heat to equipment or plant which may have contained the fertilizer without first washing thoroughly to remove all fertiliser.

**11. TOXICOLOGICAL INFORMATION****Toxicity Data**

Product toxicity will depend on the composition.

Ammonium Nitrate: LD50 (oral, rat) >2000mg/kg  
May cause methaemoglobinaemia  
Ammonium Phosphate: LD50 (oral, rat) > 2000mg/kg  
Potassium Chloride or Sulphate: LD50 (oral, rat) > 2000mg/kg

**12. ECOLOGICAL INFORMATION**

Mobility: The nitrate ion is mobile. The ammonium ion is absorbed by soil.  
Persistence/Degradability: The nitrate ion is mobile; the ammonium ion is absorbed by soil particles. Phosphates, whether water or citrate soluble, are translocated in the soil over very short distances and are then immobilised. The dissolved potassium ion in the soil solution is absorbed by clay minerals; where these are absent in light soils, part of the potassium may be leached.  
Bio-accumulation: The product does not show any bio-accumulation phenomena.  
Ecotoxicity: Low toxicity to aquatic life.

**13. DISPOSAL CONSIDERATIONS**

Depending on the degree of contamination, dispose of through application thinly on open ground or to an authorized 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

UN Classifications: Not classified, i.e., considered non-hazardous material according to the UN Orange Book and international transport codes, e.g., RID (rail), ADR (road) and IMDG (sea).

15. REGULATORY INFORMATION

EC Directives: 76/116/EEC (Relating to fertilisers)  
National Regulations: The Fertilisers Regulations 1991 and subsequent amendments.

16. OTHER INFORMATION

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 do 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.

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