

## SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
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**PSDS GROUP 7 PRODUCT**  
**PRODUCT SAFETY DATA SHEET                      GROUP 7**

2. COMPOSITION/INFORMATION ON INGREDIENTS
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Products in Group 7 are the solid compound fertilizers (NKP, NP, NK) which are not based on ammonium nitrate.

These amounts may contain some or all of the following ingredients. Ammonium sulphate, urea, mono and di-ammonium phosphate, normal (single) superphosphate, triple superphosphate, phosphate rock, potassium chloride (muriate of potash), potassium sulphate, calcium nitrate, urea formaldehyde, ferrous-sulphate, inert fillers such as sand or limestone and coating materials such as oil, amine, clay or talc, secondary nutrients and / or micro-nutrients.

3. HAZARDS IDENTIFICATION
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Human Health

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

4. FIRST AID MEASURES
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Skin Contact –	wash the affected area with soap and water
Eye Contact –	irrigate the eyes with copious amounts of eye wash solution or water for at least 10 minutes. Obtain medical advice if symptoms persist.
Ingestion -	<b>DO NOT</b> induce vomiting. Give milk or water to drink. Obtain medical attention if more than small quantities have been swallowed.
Inhalation -	Remove from the source of exposure to dust. Keep warm and at rest. Obtain medical advice if symptoms persist.

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 fertilizer is not directly involved in the fire use the best means available to control the fire.

When the fertilizer is involved:

- a. Avoid breathing the fumes. Whenever possible wear an approved breathing mask when fighting the 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 fertilizer to run into drains

If water containing the fertiliser enters any drain or watercourse, inform the local authorities and appropriate water authorities immediately. Note also First Aid precautions.

#### 6. ACCIDENTAL RELEASE MEASURES

Clean up spillage promptly. Sweep up and place in clean appropriately labeled container.

#### 7. HANDLING AND STORAGE

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

Storage: The basic requirements are the avoidance of contamination and involvement in a fire. Locate away from sources of heat, fire and explosion. Keep away from combustible materials and chemical materials and chemical substances, taking particular care on farms to ensure that it is not stored near hay, straw, grain, diesel or other combustible materials. Ensure a high standard of housekeeping in the storage areas. Do not permit smoking or the use of naked lights. Buildings used for storage should be dry and well ventilated. Stacks therein should be at least 1 metre from walls, eaves and beams. Further storage guidance is given in HSE Guidance IND (G) 230L.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational EXPOSURE Limits:

No specific official limits. AGGIH recommended value (1995-1996) for inhalable particulate. TLV/TWA 10mg/M2

Precautionary and engineering measures:

avoid high dust concentrate and provide ventilation where necessary.

Personal Protection:

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White, gray or brown granules or prills unless deliberately coloured during manufacture
Odour:	Odourless
Ph water solution (100G/1)	Usually >4.5
Bulk Density:	Normally between 900 – 1100kg/m <sup>3</sup>
Solubility in Water:	Soluble in water, extent depends on composition

Most formulations are hygroscopic.

## 10. STABILITY AND REACTIVITY

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

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

## 11. TOXICOLOGICAL INFORMATION

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

Inhalation: Low toxicity dust but a high concentration of air-borne material may cause irritation of the nose and upper respiratory tract with symptoms such as sore throat and coughing. Generally regarded as a nuisance dust with no specific official Occupational EXPOSURE Limit (OEL). Recommended total inhalable dust standard for nuisance dust of 10mg / m<sup>3</sup> as an 8 hour Time Weighted Average. See HSE Guidance Notes EH40 and HSG 173.

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

## 12. ECOLOGICAL INFORMATION

As this fertilizer contains phosphate, heavy spillage may cause adverse environmental impact such as eutrophication in confined surface water.

### Toxicity Data

Product toxicity will depend on the composition

Ammonium Sulphate	LD50 (oral, rat) > 2000mg/kg
Mono-ammonium phosphate	LD50 (oral, rat) > 2000mg/kg
Di-ammonium phosphate	LD50 (oral, rat) > 2000mg/kg
Potassium chloride or sulphate	LD50 (oral, rat) > 2000mg/kg
Calcium Nitrate	LD50 (oral, rat) > 2000mg/kg

### Mobility

Very soluble in water. The ammonium ion is absorbed by the soil.

Persistence/Degradability 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 immobilized. 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 if the use on farm by spreading 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 Classification. Classified as non-hazardous.

### 15. REGULATORY INFORMATION

EC Directives

76/116/EEC (Relating to fertilizers)

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 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 disclaims any liability for loss or damage resulting from the use of this data, information or suggestions.

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