

SAFETY DATA SHEET

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

Product	Sulphate of Potash
Supplier	Westland Horticulture Ltd 14 Granville Industrial Estate Granville Road Dungannon Co Tyrone BT70 1NJ
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PSDS GROUP 8 PRODUCT
PRODUCT SAFETY DATA SHEET GROUP 8

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	: Sulphate of Potash (Potassium Fertilisers).
Origin & Composition	: EU NPK Fertiliser 0:0:48. Total Potassium Oxide (K ₂ O), 48%, of which 39.8% K is soluble in water.
Molecular Formula	: K ₂ SO ₄
Commonly used synonyms	: SOP / WS-SOP
CAS Number	: 7778-80-5
EINECS Number	: 231-915-5
Classification	: UN classification is non-hazardous. Not classified as hazardous material according to EEC Directive 8/379/EEC, IMO, IATA, RID/ADR.

3. HAZARDS IDENTIFICATION

Human Health The fertilisers are basically harmless products when handled correctly. However the following points should be noted.

Skin Contact: Prolonged contact may cause some irritation.

Eye Contact: May cause irritation following contact.

Ingestion: Small quantities are unlikely to cause toxic effect.

Inhalation: High dust concentrations of air-borne material may cause irritation of the nose and upper respiratory tract with symptoms such as sore throat and coughing.

Long term effects: No adverse effects are known.

Fire and thermal decomposition product
Inhalation of decomposition gases can cause irritation and corrosive effects on the respiratory system. Some lung effects may be delayed.

Environment As this fertiliser contains a high proportion of phosphorous, heavy spillage may cause adverse environmental impact.

Other Fire, heating and detonation: The fertilisers are not themselves combustible .

4. FIRST AID MEASURES

Product

- Inhalation : Remove from source of exposure to dusts. Obtain medical attention if ill effects occur.
- Skin Contact : Wash the affected area with soap and water.
- Eye Contact : Flush/irrigate eye with copious amounts of water for at least 10 minutes. Obtain medical attention if eyes irritation persists.
- Ingestion : Rinse mouth with copious amounts of water. Drink milk and do not induce vomiting. Obtain medical attention if more than a small quantity has been swallowed.

Fire and Decomposition Products

- Skin Contact: Wash areas in contact with material copiously with cold water. Obtain medical attention.
- Inhalation: Remove from the source of exposure to fumes. Keep warm and at rest even though no symptoms may be evident. Give oxygen, especially if the person is blue in the face. Artificial respiration should only be applied if breathing fails.
- Following exposure, the person should be kept under medical review for at least 48 hours as delayed pulmonary oedema may develop.

5. FIRE FIGHTING MEASURES

If fertilizer is **not** directly involved in the fire Use the best means available to extinguish the fire.

If any fertilizer is involved in the fire

Call the fire brigade. Avoid breathing the fumes (toxic). Stand up-wind of the fire. Use a self-contained breathing apparatus if fumes are being entered. Use plenty of water. Do not use chemical extinguishers or foams or attempt to smother the fire with steam or sand. Open doors and windows of the store to give maximum ventilation. Do not allow molten fertilisers to run into drains. Prevent any contamination of fertiliser by oils or other combustible materials. Should water containing fertiliser enters any drains or watercourse, inform the local authorities immediately. If fertiliser stored in bulk is decomposing, use a special self-propelled water lance to penetrate the heap to the seat of decomposition. (See Section 3.)

6. ACCIDENTAL RELEASE MEASURES

- Any spillage of fertiliser should be cleaned up promptly, swept up and placed in a clean labelled open container for safe disposal. Do not allow to mix with sawdust and other combustible or organic substances.
- Depending on the degree and nature of contamination, dispose of by use as a fertiliser or to an authorised waste facility.
- Take care to avoid the contamination of watercourses and drains and inform the appropriate authority in case of accidental contamination of watercourses.

7. HANDLING AND STORAGE

- Handling:** Use gloves and safety goggles when handling the material for longer periods. Avoid excessive generation of dust. Avoid fertiliser contamination by combustible (such as diesel oil, grease) and incompatible materials. Avoid unnecessary exposure to the atmosphere to prevent moisture pick-up.
- Storage:** Store in original close packing. (The product is hygroscopic hence absorbs moisture). Locate away from the source of heat or fire. Keep away from combustible materials and substances. Ensure that the fertiliser is not stored near hay, straw, grain diesel oil, etc. Ensure high standard of housekeeping in the storage area. Do not permit smoking and the use of naked lights in the storage areas. Restrict stack size (according to local regulations) and keep at least 1 m in distance around stacks of bagged products. Any building used for the storage should be dry and well ventilated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits - No specific official limits. ACGIH recommended value (1995-96) for inhalable particulate: TLV/TWA: 10mg/m³.

- Hygiene:** Don't eat, smoke or drink during work.
- Respiratory Protection:** Use dust mask/respirator as dust formation may occur.
- Hand Protection:** Use PVC gloves when handling the material for longer periods.
- Eye Protection:** Use safety goggles when handling the material for longer periods.
- Skin Protection:** Normal work clothing.
- Exhibition Limits:** MAC-value 5mg/m³ (annoying dust).
- After handling product, wash hands and observe good hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical State** : Fine powder.
- Colour** : White, grey powder.
- Odour** : Odourless.
- Melting Point** : May decompose before melting.
- Explosive components** : The product is not explosive as per EEC test A14 (67/548/EEC).
- pH in water** : 3-4 (10% solution in water).
- Bulk density** : 1050-1100kg/m³.
- Stability in water** : Stable.

The fertiliser has a high resistance to detonation. This resistance is decreased by the presence of contaminants and/or high temperatures.

- Oxidising properties** : Not classified as an oxidizing material according to Directive 88/379/EEC.

10. STABILITY AND REACTIVITY

- Stability:** The product is stable under normal conditions of storage, handling and use.
- Conditions to be avoided:** Unnecessary exposure to atmosphere and closeness to source of heat. Before welding, clean up. Contamination by incompatible materials such as combustible materials, reducing agents, acids and bases.
- Dangerous decomposition products:** see Section 3

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	: Product toxicity would depend on composition. Not harmful.
General	: LD50 > 2000mg/kg.
Eye contact	: Irritation.
Skin contact	: Irritation after longer exposure.
Ingestion	: Unlikely, see Section 4.
Inhalation	: See section 8 for pre-exposure measures. Refer to section 3 & 4.
Chronic affected	: No adverse effects known.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	The product is used as a fertiliser and is not harmful to the environment when used as recommended. Low toxicity to aquatic life.
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13. DISPOSAL CONSIDERATIONS

Removal of remainder:	See Section 6. If not polluted with other materials it should be considered to re-use the remainder as a fertiliser.
Transport:	See Section 6.

14. TRANSPORT INFORMATION

UN Number	: None.
Classification	: Non-Hazardous.
ADR/RD	: Not applicable.
IMO	: Not applicable. The product does not show self-sustaining decomposition properties in the trough test.

15. REGULATORY INFORMATION

Information on the label	: Directive 76/116/EC (Law relating to Fertilisers). 82/501/EEC, 87/216/EEC and 88/610/EEC (Seveso Major Accident Hazard).
Danger symbols	: None.
Risk phrases	: None.
Safety advice	: None.

16. OTHER INFORMATION

The information contained in the Safety data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

Westland Horticulture Limited do not accept responsibility for damage caused by incorrect use of this information.

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