

PRODUCT SAFETY DATA SHEET

1. † Identification of the Product and the Company:

Trade Name: KOSMAN
Function: A fertiliser for agricultural applications

Marketed by:
Headland Agrochemicals Ltd.
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Pentre
Deeside
Flintshire CH5 2DH

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2. Hazards Identification:

Oxidiser.

Harmful – danger of serious damage to health by prolonged exposure by inhalation and if swallowed. Risk of serious damage to eyes.

Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

3. Composition / Information on Ingredients:

A soluble fertiliser containing potassium nitrate and manganese sulphate with dispersing and chelating agents.

Hazardous components:

Potassium nitrate (O, R8)
Manganese sulphate (Xn, R48,20/22, N, R51/53)

4. First Aid Measures:

First aiders should prevent themselves becoming contaminated.

Seek medical attention if anyone has symptoms apparently due to inhalation, ingestion or contact.

Eyes: Irrigate contaminated eyes immediately with clean water for 15 minutes. Hold eyelids apart during irrigation to ensure thorough flushing of the entire area of the eyes and lids. Obtain medical attention without delay.

Skin: Remove contaminated clothing and wash affected area with water. Seek medical advice if any redness or irritation persists

Ingestion: Keep patient at rest. Obtain medical attention without delay.

Inhalation: Remove patient to fresh air and obtain medical attention.

5. Fire Fighting Measures:

This product is an oxidiser. Contact with combustible materials may cause fire. If involved in a fire fumes and vapours will be harmful and include oxides of nitrogen and sulphur. Fire-fighters should wear self-contained breathing apparatus. Use water spray, carbon dioxide, chemical-resistant foam, sand or earth..

Prevent entry of fire-fighting water into waterways or drains by bunding if possible. Inform the Environment Agency if contamination of waterways or drains is threatened or occurs.

6. Accidental Release Measures:

Wear suitable protective clothing (See Section 8 below). Sweep or shovel up spillage and re-use if possible; otherwise place in a labelled container for later removal to a safe place for disposal. Avoid raising dust clouds. Wash the area with water when all the spill has been removed.

Prevent contamination of sewers, drains or waterways.

Advise the Environment Agency if contamination of waterways is threatened or occurs.

7. Handling & Storage:

Use only in a well ventilated area. Wash thoroughly after handling.

Avoid breathing dust.

Avoid prolonged or repeated contact with the skin.

Avoid all contact by mouth.

Keep cool and dry in a suitable well-ventilated store.

Keep out of direct sunlight and away from direct sources of heat and combustible materials.

Keep away from food, drink and animal feedingstuffs and out of reach of children.

8. Exposure Controls/Personal Protection:

Wear suitable protective clothing, gloves and eye/face protection. If necessary, for personal comfort, wear suitable respiratory protection e.g. a dust mask when handling the product or dealing with spillages.

Occupational Exposure Limits: None specified

9. Physical & Chemical Properties:

Appearance: A light brown crystalline solid

Odour: Mild chemical odour

Solubility: Very soluble in water

10. Stability & Reactivity:

This product is stable for at least 2 years under normal storage conditions.

Conditions to avoid: strong acids, strong alkalis, reducing agents and combustible materials.

11. Toxicological information:

Acute oral LD50 >2000 mg/kg.bw (calculated)

Acute dermal LD50 >4000 mg/kg.bw (calculated)

Irritating to eyes, skin and respiratory system.

Chronic over-exposure may cause serious damage to health.

12. Ecological Information:

This product is toxic to aquatic organisms. It may cause long-term adverse effects in the aquatic environment. Do not contaminate surface waters or ditches with chemical or used containers.

The components of this product are biodegradable. Bioaccumulation is unlikely.

13. † Disposal Considerations:

Surplus product should be disposed of as chemical waste if it is not possible to use it for its proper purpose. Dispose of empty containers according to local permissions. Do not re-use empty containers.

14. Transport Information:

Road Transport:	Potassium nitrate
UN Number:	1486
Proper shipping name:	Potassium nitrate
UN Class:	5.1
Packing group:	III
IMDG Description:	Marine pollutant

15. Regulatory Information

Hazard Symbols:	Oxidiser (O) Harmful (Xn) Dangerous for the Environment (N)
Risk Phrases:	Contact with combustible material may cause fire Harmful – danger of serious damage to health by prolonged exposure by inhalation and if swallowed. Risk of serious damage to eyes. Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
Safety Phrases:	Keep out of reach of children Do not breathe dust or spray mist Avoid contact with eyes In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. Use appropriate containment to avoid environmental contamination.

16. Other Information

The above information is intended to give health and safety guidance on the storage and transport of the substance or product to which it relates. It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals

complied with. The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted for any injury loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

KOSMAN is a trademark.

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Sections updated since last issue:	marked † in margin