



SAFETY DATA SHEET

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

| | |
|----------------------|---|
| Product | Gro-Sure Slow Release Plant Food |
| Usage | Fertiliser/ Plant nutrient |
| Supplier | Westland Horticulture Ltd 14 Granville Industrial Estate Granville Road Dungannon County Tyrone BT70 1NJ |
| Email | customerservice@WestlandHorticulture.com |
| Emergency Tel | 01480 443789 (UK) |

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture According to Regulation (EC) No 1272/2008:

Not classified

Classification of the Substance or Mixture According to Directive 67/548/EEC or Directive 1999/45/EC:

Not classified




Label Elements According to Regulation (EC) No 1272/2008:

| | |
|--------------------------|---|
| Hazard Pictograms | None |
| Signal Word | None |
| Hazard Statements | Not applicable |
| Precautionary Statements | Not applicable |
| Other hazards | Product forms slippery surface when combined with water |

3. COMPOSITION/INFORMATION ON INGREDIENTS

Description Mixture

Hazardous components/components having designated Workplace Exposure Limits:

| Ingredient | Identifiers | Concentration %W/W | Warning Symbols | Directive 67/548/EEC | Regulation (EC) No 1272/2008 (CLP) |
|------------------------|---------------------------------|--------------------|--|----------------------|--|
| Potassium Nitrate | CAS: 7757-79-1 EC: 231-818-8 | 0 – 35% |  | O; R8 | Ox. Sol. 3, H272 |
| Ammonium Nitrate | CAS: 6484-52-2 EC: 229-347-8 | 7.5 – 10 % |   | O; R8 Xi; R36 | Ox. Sol. 3, H272 Eye Dam/Irrit. 2, H319 |
| Monoammonium Phosphate | CAS: 7722-76-1 EC: 231-764-5 | 0 - 7.5% | | Not classified | Not classified |
| Calcium Fluoride | CAS: 7789-75-5 EC: 232-188-7 | 1 – 1.5 % | | Not classified | Not classified |

See Section 16 for the full text of the R phrases or H statements declared above

4. FIRST AID MEASURES

General Advice: Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or physician, or going for treatment.

Inhalation: Move person to fresh air.
Keep patient warm and at rest.

Skin Contact: Wash off with soap and plenty of water.
Get medical advice if irritation develops

Eye Contact: Rinse with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses and continue flushing.
Get medical attention if irritation occurs

Ingestion: Rinse out mouth with water
If material has been swallowed and the expose person is conscious, give small quantities of water to drink
Get medical advice if person feels sick

Information for doctor: No specific treatment, treat symptomatically

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Use flooding quantities of water

Unsuitable Extinguishing Media:

Do not use chemical extinguisher or foam

Do not attempt to smother the fire with steam or sand

Specific Hazards Arising From the Substance or Mixture:

The product itself is not combustible but it can support combustion, even in absence of air.

On heating it melts and further heating can cause decomposition, releasing toxic fumes containing nitrogen oxides, sulfur oxides, phosphorous oxides, halogenated compounds, metal oxides and ammonia

Exposure to decomposition products may be a hazard to health. Symptoms may be delayed following exposure

Special Protective Equipment for Fire Fighters:

Wear full protective clothing and self-contained breathing apparatus.

Further Information:

Use water spray for cooling endangered receptacles and diluting toxic gases

Do not allow molten material or run-off from fire fighting to enter drains or water courses.

If fire run-off water enters drains or water course, inform the appropriate water authorities immediately

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid formation / breathing of dust. Ensure adequate ventilation

Avoid contact with skin and eyes

Environmental Precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers

Methods and Materials for Containment and Cleaning Up:

Vacuum or sweep up material.

Place into suitable labelled containers for disposal according to local / national regulations

Additional Advice: If large quantities of the product contaminates water courses or drains (including via contaminated soil & vegetation), inform respective authorities.

Reference to other sections:

See Section 8 for information on personal protection equipment

See Section 13 for disposal information



7. HANDLING AND STORAGE

Handling:

- Prevent dust formation and inhalation
- Avoid contact with eyes and skin
- Do not eat, drink or smoke when using this product
- Take off contaminated clothing and wash before reuse
- Avoid unnecessary exposure to atmosphere to prevent moisture pick up
- Wash hands forearms and face and observe good hygiene practice after handling this product

Storage:

- Keep containers closed tightly in a dry, cool and well-ventilated place.
- Keep product in original labeled containers
- Storage areas should be appropriately sited to prevent environmental contamination
- Keep away from organic materials, oil and grease, food and drink
- Protect from direct sun light

Specific End Uses:

Use as fertiliser according to the instruction on the label

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Ingredients with limit values that require monitoring at the workplace:

| Ingredient | Work Exposure Limit (WEL) | |
|---|---|---|
| | Long-term Exposure Limit (8-hr TWA reference period) | DNEL (Derived No Effect Level) |
| Potassium Nitrate | | 12.5 mg/kg/day, Dermal, general population 20 mg/kg/day, Dermal, workers 10.9 mg/m ³ , Inhalation, general population 36.7 mg/m ³ , Inhalation, workers 12.5 mg/kg bw/day, Oral, general population |
| Monoammonium Phosphate | | 20.8 mg/kg bw/day, Dermal, general population 34.7 mg/kg/day, Dermal, workers 1.8 mg/m ³ , Inhalation, general population 6.1 mg/m ³ , Inhalation, workers 2.1 mg/kg bw/day, Oral, general population |
| Calcium Fluoride (CaF ₂) | 2.5 mg/m ³ (Calculated as F) | |



Exposure Controls

- Engineering Measures:** No special ventilation requirements.
Avoid high dust concentration and provide ventilation where necessary
- Protective Measures:** The use of technical measures should always have priority over the use of personal protective equipment
A risk assessment based on the task being performed and the risks involved should be carried out to determine personal protection equipment required
When selecting personal protective equipment, seek appropriate professional advice
Personal protective equipment should be certified to appropriate standards
- Respiratory Protection:** Not necessary if room is well ventilated
Use suitable particulate filter respirator if dust concentration is high or if a risk assessment indicates this is necessary
- Hand Protection:** Wear chemical resistant gloves (rubber or neoprene) when handling the product over long periods or if a risk assessment indicates this is necessary
- Eye Protection:** Wear eye protection when a risk assessment indicates this is necessary to avoid exposure to dust
- Skin and Body Protection:** Protecting work clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid, blue and orange prills
Odour: Odourless

Other Properties:

| | Value | Temperature |
|---------------------|----------------|-------------|
| Bulk density | 0.9 - 1.2 g/ml | |
| Melting temperature | > 210 °C | |

No other relevant information available



10. STABILITY AND REACTIVITY

- Chemical Stability:** Stable under normal conditions of storage, handling and use
- Hazardous Reactions:** Hazardous reactions will not occur under normal transport or storage conditions
- Hazardous Decomposition:** Heating or fire can release toxic and corrosive vapours and fumes such as nitrogen and potassium oxides
Reacts with some strong acids to form toxic and corrosive vapours and fumes
- Incompatible Materials:** Alkalis, combustible materials, reducing materials, organic materials, strong acids and powdered metals
- Conditions to Avoid:** Avoid contamination by any source including metal, dust and organic materials

11. TOXICOLOGICAL INFORMATION

- Acute Toxicity:** No known significant effects or critical hazards based on individual components
- Acute Oral Toxicity:** Ammonium Nitrate: LD50 Median lethal dose rat, 2950 mg/kg
Calcium Fluoride: LD50 Median lethal dose rat, 2000 mg/kg
Potassium Nitrate: LD50 Median lethal dose rat, >2000 mg/kg
Monoammonium Phosphate: LD50 Median lethal dose rat, \pm 5750 mg/kg
Urea: LD50 Median lethal dose rat, \pm 8471 mg/kg
- Acute Inhalation Toxicity:** Calcium fluoride: LC50 Median lethal concentration rat, 5.07 mg/l, 4h
Potassium Nitrate: LC50 Median lethal concentration rat, >0.527 mg/l, 4h
- Acute Dermal Toxicity:** Ammonium Nitrate: LD50 Median lethal dose rat, >5,000 mg/kg
Potassium Nitrate: LD50 Median lethal dose rat, >5,000 mg/kg bw
Monoammonium Phosphate: LD50 Median lethal dose rabbit, >7940 mg/kg
Urea: LD50 Median lethal dose rabbit, >21000 mg/kg
- Skin Irritation:** Slightly irritating to the skin after continuous/repeated exposure
- Eye Irritation:** Irritation of the eye tissue after continuous/repeated exposure
- Respiratory or Skin Sensitization:** No known significant effects or critical hazards
- Long Term Toxicity:** No known significant mutagenic, carcinogenic, teratogenic or reproductive toxicity effects or critical hazards
- STOT- repeated exposure:** No known significant effects or critical hazards



12. ECOLOGICAL INFORMATION

Toxicity : No known significant effects or critical hazards based on ingredients

- **Toxicity To Fish:** Ammonium Nitrate: LC50, 447 mg/l, fresh water, 48h
Potassium Nitrate: LC50, >1000 mg/l, salt water
Monoammonium Phosphate, >85.9 mg/l
- **Toxicity To Aquatic Invertebrates:** Ammonium Nitrate: EC50 Daphnia, 490 mg/l, fresh water, 48h
Calcium Fluoride: EC50 water flea, 26 mg/l, fresh water, 96h
EC50 water flea, 10.5 mg/l, marine water, 96h
- **Toxicity To Aquatic Plants:** Ammonium Nitrate: EC50 algae, 1700 mg/l, 10d
Potassium Nitrate: EC50 algae, >1700 mg/l, salt water, 10d
Monoammonium Phosphate: EC50 algae, >100mg/l, 72h
Calcium Fluoride: EC50 algae, 43 mg/l, fresh water, 96h
EC50 algae, 81 mg/l, marine water, 96h

Persistence and Degradability : No known significant effects or critical hazards

- **Biodegradability:** Not relevant for inorganic substances such as ammonium nitrate, potassium nitrate and calcium fluoride

Mobility in Soil: No known significant effects or critical hazards

Bioaccumulative Potential: No known significant effects or critical hazards

Results of PBT and vPvB assessment: Not applicable, inorganic product

Other Dangerous Effects: May cause eutrophication

13. DISPOSAL CONSIDERATIONS

Product: Do not contaminate ponds, waterways or ditches with significant quantities of product
Check if agriculture use is possible. Dispose of by use on farm as a fertiliser, by spreading thinly on open ground
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated Packaging: Empty remaining contents.
Completely empty containers can be put in the bin or disposed of in compliance with applicable local regulations



14. TRANSPORT INFORMATION

Land Transport (ADR /RID) Not dangerous goods

Maritime Transport (IMDG) Not dangerous goods

Air Transport (IATA-DGR) Not dangerous goods

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance of mixture:

This mixture is classified in accordance with Directive 1999/45/EC, regulation 1272/2008 and the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations

The mixture is also regulated by the following legislation:

EC Directives: 76/116/EEC (Relating to fertilisers)

National Regulations: The Fertilisers Regulations 1991 and subsequent amendments

Chemical Safety Assessment: This product contains substances for which Chemical Safety Assessments are still required

16. OTHER INFORMATION

Recommended uses and restrictions: Follow the instructions

Full texts of abbreviated H Statements refer to under Section 3:

H319 Causes serious eye irritation
H272 May intensify fire; oxidiser

Full texts of abbreviated R phrases refer to under Section 3:

R8 Contact with combustible material may cause fire
R36 Irritating to eyes

Full text of Classifications

- **CLP/GHS:** Eye Dam/ Irrit 2; Eye damage/ Irritation, Category 2
Ox. Sol. 3;; Oxidising solids, Category 3
- **DSD/DPD:** O; Oxidising
Xi; Irritant



Abbreviations and Acronyms

| | |
|------------------------------|--|
| ADR | International Carriage of Dangerous Goods by Road |
| CAS No | Chemicals Abstract Service Registry Number |
| Directive 67/548/EEC | Dangerous Substances Directive (DSD) |
| EC No | European Community Number for chemicals within EU regulations |
| IATA-DGR | Dangerous Goods Regulations by the International Air Transport Association |
| IMDG Code | International Maritime Dangerous Goods Code |
| PBT | Persistent, Bioaccumulative and Toxic Properties |
| Regulation (EC) No 1272/2008 | Classification, Labelling and Packaging (CLP) |
| RID | International Transport of Dangerous Goods by Rail |
| vPvB | Very Persistent and Very Bioaccumulative Properties |

Further information

Before using this product, ensure that you read and understand its label

MSDS information:

This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, 1272/2008 and Annex I of the REACH regulation 453/2010.

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 does 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.

For further information please contact Westland Horticulture Ltd, 14 Granville Industrial Estate, Granville Road, Dungannon, County Tyrone, BT70 1NJ.