



SAFETY DATA SHEET

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

Product	Superphosphate
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:

Eye Dam. 1 H318 Causes serious eye damage

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

Xi; Irritant R41 Risk of serious eye damage

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

Hazard Pictograms GHS05 - Corrosive



Signal Word Danger

Hazard Statements H318 Causes serious eye damage

Precautionary Statements

P280 Wear gloves and eye protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing
P310 Immediately call a Poison Center or doctor/physician

Other hazards Not applicable



3. COMPOSITION/INFORMATION ON INGREDIENTS

Description Substance
Superphosphates (SSP): CAS No 8011-76-5
EC Number: 232-379-5
This product is a multi-constituent substance

Ingredient	Identifiers	Concentration %W/W	Warning Symbols	Directive 67/548/EEC	Regulation (EC) No 1272/2008 (CLP)
Calcium bis (dihydrogen-ortho-phosphate)	CAS : 7758-23-8 EC: 231-837-1	>23 %		Xi; R41	Danger Eye Dam. 1 H318
Calcium Sulphate	EC: 231-900-3 CAS: 7778-18-9	>45 %			

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.
Get medical advice if respiratory problems occur
- Skin Contact:** Immediately wash off with soap and plenty of water.
Get medical advice if irritation persists
- Eye Contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses and continue flushing.
Get medical treatment
- Ingestion:** Rinse out mouth immediately after ingestion and then drink plenty of water
Get medical attention if symptoms persist

Most important symptoms and effects

After Eye Contact: Redness of the eye tissue. Irritation of the eye tissue



5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

The product is not flammable
Suitable extinguishing media for the surrounding fire should be used
Foam, fire extinguisher powder, carbon dioxide, water spray

Extinguishing Media Which Must Not Be Used For Safety Reasons:

Water with full jet

Specific Hazards Arising From the Substance or Mixture:

Fire will produce hazardous products of combustion such as Sulphur and Phosphorous oxides (SO_x, P₂O₅)
Exposure to decomposition products may be a hazard to health

Special Protective Equipment for Fire Fighters:

Wear full protective clothing and self-contained respiratory apparatus.

Further Information:

Collect contaminated fire fighting water separately. Do not allow to enter surface or ground water or sanitary sewer system.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid formation / breathing of dust
Ensure adequate ventilation
Wear protective clothing
Use respiratory protective device against the effects of dust

Environmental Precautions:

Do not allow product to enter surface or ground water or sanitary sewer system.

Methods and Materials for Containment and Cleaning Up:

Sweep up and shovel into suitable containers for disposal according to local / national regulations
Dispose contaminated material as waste according to Section 13
Damp down dust with water spray

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
- Ensure good ventilation at the work place
- Avoid contact with eyes and skin
- Do not eat, drink or smoke when using this product
- Avoid unnecessary exposure to atmosphere to prevent moisture pick up
- Wash hands and observe good hygiene practice after handling this product (i.e. before breaks and at the end of work)

Storage:

- Keep containers closed tightly in a dry, cool and well-ventilated place.
- Keep away from alkalis (caustic solutions) and urea
- Keep away from foodstuffs, beverages and feed
- Protect from heat and direct sunlight
- Protect from humidity and water

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: Not required

Derived No Effect Level (DNELs)	Predicted No Effect Concentration (PNECs)
Long Term Systemic effects Oral: 2.1 mg/kg bw/day (General Population)	Fresh Water: 1.7 mg/l
Long Term Systemic effects Dermal: 10.4 mg/kg bw/day (General Population) 17.4 mg/kg bw/day (Workers)	Marine Water: 0.17 mg/l
Long Term Systemic effects Inhalative: 0.9 mg/m ³ (General Population) 3.1 mg/m ³ (Workers)	Aqua (intermittent releases): 17 mg/l
	STP: 10 mg/l



Exposure Controls

Engineering Measures: Avoid high dust concentration and provide ventilation where necessary. Ventilation must be sufficient to maintain TLV-TWA below $3\text{mg}/\text{m}^3$, respirable particles, and $10\text{mg}/\text{m}^3$, inhalable particles

Protective Measures: The use of technical measures should always have priority over the use of personal protective equipment
When selecting personal protective equipment, seek appropriate professional advice
Personal protective equipment should be certified to appropriate standards
The usual precautionary measures are to be adhere to when handling chemicals

Respiratory Protection: Not necessary if room is well ventilated
Use suitable dust mask with filter type P2 if dust concentration is high

Hand Protection: Wear protective gloves. The selection of suitable gloves depends on the material and quality.
Material of gloves: butyl rubber (0.7mm), nitrile rubber (0.4 mm), chloroprene rubber (0.5mm)

Eye Protection: Wear tightly sealed goggles

Skin and Body Protection: Protecting work clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light brown/grey powder or granules

Odour: Acidic

Other Properties:

	Value	Temperature	Method
pH (100g/l)	3.7	20 °C	
Bulk density	1000-1200 kg/m^3		
Solubility in water	1-100g/l	20 °C	
Decomposition temperature	> 200 °C		

Product is not flammable, not self-igniting and does not present an explosion hazard

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.
Reacts with alkali
Mixing with urea causes formation of very sticky urea phosphate
- Hazardous Decomposition:** Heating or fire can release toxic or irritant vapours e.g. Sulphur oxides, Phosphorous oxides
- Conditions To Avoid:** Avoid dust formation
Keep away from naked flames/heat
- Incompatible Materials:** Alkalis and Urea

11. TOXICOLOGICAL INFORMATION

- Acute Toxicity:** No test data available.
Not classified for acute toxicity as per analogous substance below
- 7783-28-0 Diammonium hydrogenorthophosphate**
Median lethal dose Oral, LD50 >2000 mg/kg (Rat)
Median lethal dose Dermal, LD50 >5000 mg/kg (Rat)
Median lethal concentration Inhalation, LC50 >5 mg/l, 4h, (Rat)
- Corrosion/Irritation:** On the skin: As per analogous substance 7722-76-1 Ammonium dihydrogen-orthophosphate. No irritating effect, rabbit, OECD 404
On the eye: Irritating effect, rabbit, OECD 405, EC B.5
- Sensitization:** No test data available. As per analogous substance 7783-28-0 diammonium hydrogenorthophosphate. Not sensitizing, mouse. OECD 429, EC B.42
- Specific Target Organ Toxicity:** No test data available.
No classification is necessary as per analogous substance below
- 65996-95-4 Superphosphates, concd (TSP)**
Oral, NOAEL, 250mg/kg bw/day, Rat, OECD 422 (Subacute)
- Mutagenicity:** Negative. Not classified for mutagenic or genotoxic toxicity. OECD 473
- Carcinogenicity:** No test data available. Not classified for carcinogenicity
- Reproductive Toxicity:** No classification is necessary as per analogous substance below.
65996-95-4 Superphosphate concentrated, NOAEL 750mg/kg bw/day, rat, oral



12. ECOLOGICAL INFORMATION

Ecotoxicity: Inorganic phosphates are not considered to be toxic to aquatic species

- **Toxicity to Fish:** 7722-76-1 Ammonium dihydrogenorthophosphate. Median Lethal Concentration LC50 >85.9 mg/l, 96h, Oncorhynchus mykiss, fresh water, OECD 203
- **Toxicity to Aquatic Invertebrates:** 8011-76-5 Superphosphate. Median Lethal Concentration LC50 1790 mg/l, 72h, Daphnia carinata, freshwater
- **Toxicity to Algae and Other Aquatic Plants:** 65996-95-4 Superphosphate concentrated (TSP), EC50 >87.6 mg/l, 72h, algae, OECD 201

Persistence and Degradability: the substance is inorganic, therefore no biodegradation tests are applicable. This product dissociates into Calcium, sulfate and phosphate ions, which cannot be further degraded.

- **Bioaccumulative Potential:** Not bioaccumulative. This substance is highly water soluble and dissociating.
- **Mobility in Soil:** Low potential for adsorption in soil based on substance properties
- **PBT and vPvB assessment:** No assessment required for inorganic substances

Other Information: The product should not get in high quantities into waste water because it may act as a plant nutrient and cause eutrophication

13. DISPOSAL CONSIDERATIONS

Product: Do not contaminate ponds, waterways or ditches with large quantities of product. If uncontaminated, sweep up or collect, and reuse as product. Check if agriculture use is possible. Dispose of by use on farm as a fertiliser, by spreading thinly on open ground. Small quantities can be disposed of with household waste. 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 substance is classified and labelled according to the CLP Regulation (EC) No 1272/2008

The substance is also regulated by the following legislation:

Directive 2000/60 EC (phosphates)

Chemical Safety Assessment: A Chemical Safety Assessment has been carried out

16. OTHER INFORMATION

Recommended uses and restrictions: Follow the instructions

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

H318 Causes serious eye damage

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

R41 Risk of serious damage to eyes

Full text of Classifications

- **CLP/GHS:** Eye Dam 1; Eye Damage, Category 1
- **DSD/DPD:** Xi; Irritant

Abbreviations and Acronyms

ADR	International Carriage of Dangerous Goods by Road
bw	By weight
CAS No	Chemicals Abstract Service Registry Number
EC No	European Community Number for chemicals within EU regulations
EC50	Half Maximal Effective Concentration
IATA-DGR	Dangerous Goods Regulations by the International Air Transport Association
IMDG Code	International Maritime Dangerous Goods Code



NOAEL	No observable adverse effect level
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic Properties
Regulation (EC) No 1272/2008	Classification, Labelling and Packaging
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.