



SAFETY DATA SHEET

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

Product	Sulphate of Potash
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:

Not classified

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 eye protection/face 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				
Ingredient	Identifiers	Concentration %W/W	Warning Symbols	Directive 67/548/EEC	Regulation (EC) No 1272/2008 (CLP)
Potassium Sulphate	EC: 231-915-5 CAS : 7778-80-5	>85%		Not classified	Not classified
Potassium Hydrogen Sulphate	EC: 231-594-1 CAS: 7646-93-7	3-5 %		C; R34 Xi; R37	Skin Corr. 1B; H314 STOT SE 3; H335

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: 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.
Do not apply neutralizing agents
Get advise from an ophthalmologist

Ingestion: Rinse out mouth immediately after ingestion and then drink plenty of water
Induce vomiting if the person is fully conscious
Get medical attention if symptoms occur

Most important symptoms and effects

After Inhalation: Coughing

After Skin Contact: Slight irritation

After Eye Contact: Redness of the eye tissue. Inflammation/damage of the ye tissue

After Ingestion: After absorption of high quantities: gastrointestinal complaints. Nausea. Diarrhea. Irritation of the gastric/intestinal mucosa. Decreased renal function. Disturbances of heart rate



5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Suitable extinguishing media for the surrounding fire should be used

Extinguishing Media Which Must Not Be Used For Safety Reasons:

Not unsuitable extinguishing media known.

Specific Hazards Arising From the Substance or Mixture:

Fire will produce hazardous products of combustion such as Sulphur Dioxide (SO₂)

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:

Dilute toxic gases with water spray

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid formation / breathing of dust

Ensure adequate ventilation

No naked flames

Environmental Precautions:

Do not allow 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

Reference to other sections:

See section 7 for information on safe handling

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 and observe good hygiene practice after handling this product

Storage:

- Keep containers closed tightly in a dry, cool and well-ventilated place.
- Keep away from oxidizing agents
- Protect from naked flames and heat
- Don't store in Aluminum or metal containers

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:

7778-80-5 Potassium Sulphate

Work Exposure Limit (WEL)	Derived No Effect Level (DNELs)	Predicted No Effect Concentration (PNECs)
Time weighted average exposure limit 8 h 4 R/10l mg/m ³	Long Term Systemic effects Oral: 12.8 mg/kg bw/day (General Population)	Fresh Water: 0.68 mg/l
	Long Term Systemic effects Dermal: 12.8 mg/kg bw/day (General Population) 21.3 mg/kg bw/day (Workers)	Marine Water: 0.068 mg/l
	Long Term Systemic effects Inhalative: 11.1 mg/m ³ (General Population) 37.6 mg/m ³ (Workers)	Aqua (intermittent releases): 6.8 mg/l
		STP: 10 mg/l



Exposure Controls

- Engineering Measures:** 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
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 dust mask with filter type P1 if dust concentration is high
- Hand Protection:** Wear good resistance protective gloves.
Material of gloves: rubber
- Eye Protection:** Wear safety glasses. Wear protective goggles if dust concentration is high
- Skin and Body Protection:** Protecting work clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance:** Off white powder or granules
Odour: Odourless

Other Properties:

	Value	Temperature	Method
pH (100g/l)	3 - 7		
Bulk density	1300 kg/m ³		
Solubility in water	120g / 100ml	25 °C	

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 or irritant vapours (Sulphur oxides)
- Conditions To Avoid:** Avoid dust formation
Keep away from naked flames/heat
- Incompatible Materials:** Aluminium and metal



11. TOXICOLOGICAL INFORMATION

This product is expected to be of a low toxicity but prolonged skin or eye contact may cause some irritation, skin rash, inflammation and respiratory difficulties

Acute Toxicity: No test data available. Not classified for acute toxicity as per ingredients below

Potassium Sulphate: Median lethal dose Oral, LD50 >2000 mg/kg (Rat)
Median lethal dose Dermal, LD50 >2000 mg/kg (Rat)
Median lethal concentration Inhalation, LC50 >1.2 mg/l, 4h, (Rat)

Potassium Hydrogen Sulphate: Median lethal dose Oral, LD50 2340 mg/kg (Rat)

Corrosion/Irritation: Causes serious eye damage
On the skin: Not irritating, 15 minutes, OECD 431
On the eye: Highly irritating, 4 hour, OECD 437

Sensitization: No test data available. Not sensitizing for skin as per ingredients below
Potassium Sulphate: Dermal, not sensitizing, OECD 429, Female Mouse

Specific Target Organ Toxicity: No test data available.
Low sub-chronic toxicity by the oral route as per ingredients below

Potassium Sulphate
Oral, No adverse systemic effects, \geq 1500 mg/kg bw/day, 28 days, Rat, OECD 422
Oral, No adverse systemic effects, 256 mg/kg bw/day, 52 weeks, Male Rat, OECD 453
Oral, No adverse systemic effects, 284 mg/kg bw/day, 52 week, Female Rat, OECD 453

Mutagenicity: No test data available. Not classified for mutagenic or genotoxic toxicity
Potassium Sulphate: Negative result for in vitro and in vivo

Carcinogenicity: No test data available. Not classified for carcinogenicity
Potassium Sulphate: Oral, No adverse systemic effects, 104 weeks, Rat, Male/Female

Reproductive Toxicity: No test data available. Toxicity to reproduction is unlikely to be significant
Potassium Sulphate:
Developmental toxicity: No adverse systemic effects, \geq 1500 mg/kg bw/day (28 days, Rat, Male; 53 days, Rat, Female)
Effects on fertility: \geq 1500 mg/kg bw/day, 28 days, Rate, Female/Male



12. ECOLOGICAL INFORMATION

Ecotoxicity: No test data available. Not classified as dangerous for the environment as per ingredients below

- **Toxicity to Fish:** Potassium Sulphate : LC50 680 mg/l, 96h, Pimephales promelas
Potassium Hydrogensulphate: LC50 3500 mg/l, Leuciscus idus
- **Toxicity to Aquatic Invertebrates:** Median Lethal Concentration, LC50 720 mg/l, 48h, Daphnia magna
- **Toxicity to Algae and Other Aquatic Plants:** EC50 2700 mg/l, 18 days, Chlorella vulgaris
- **Toxicity to aquatic microorganisms:** EC50 > 100 mg/l, Bacteria

Persistence and Degradability

- **Bioaccumulative Potential:** Not bioaccumulative
- **Mobility in Soil:** Low potential for absorption in soil
- **PBT and vPvB assessment:** No

13. DISPOSAL CONSIDERATIONS

Product: Do not contaminate ponds, waterways or ditches with product or used container. 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: A Chemical Safety Assessment has been carried out

16. OTHER INFORMATION

Recommended uses and restrictions: Follow the instructions

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
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

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

H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation

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

R34	Causes burns
R37	Irritating to respiratory system



Full text of Classifications

- **CLP/GHS:** Eye Dam 1; Eye Damage, Category 1
Skin Corr 1B; Skin Corrosion, Category 1B
STOT SE 3; Specific Target Organ Toxicity – Single Exposure, Category 3
- **DSD/DPD:** C; Corrosive
Xi; Irritant

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.