



SAFETY DATA SHEET

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

Product Hero Paving & Decking Concentrate

Usage Algaecide and surface biocide

Manufacturer Westland Horticulture Ltd
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Emergency Tel 01480 443789 (UK)

2. HAZARDS IDENTIFICATION


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

Eye Irr. 2 H319 Causes serious eye irritation

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 GHS07 – Irritant 

Signal Word Warning

Hazard Statements H319 Causes serious eye irritation

Precautionary Statements

P264 Wash with soap and water thoroughly after handling

P280 Wear protective gloves, clothing and eye or face protection

P305+351+338 If in eyes rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing

P337+313 If eye irritation persists, get medical attention

P501 Dispose of contents/container in accordance with local regulations

Supplemental Information

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Label Elements According to Directive 67/548/EEC or Directive 1999/45/EC:

Hazard Pictograms None

R- Phrases None

S- Phrases

- S2 Keep out of the reach of children
- S13 Keep away from food, drink and animal feedingstuffs
- S23 Do not breath spray mist
- S25 Avoid contact with eyes
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S28 After contact with skin, wash immediately with plenty of soap and water
- S29 Do not empty into drains
- S35 This material and its container must be disposed of in a safe way
- S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
- S46 If swallowed seek medical advice immediately and show this container or label.


Supplemental Information

To avoid risks to man and the environment, comply with the instructions for use

3. COMPOSITION/INFORMATION ON INGREDIENTS

Description Aqueous surface biocide and disinfectant concentrate containing 1.25% Alkyl Dimethyl Benzyl Ammonium Chloride (ADBAC)

Hazardous Ingredients

Ingredient	Identifiers	Concentration %W/W	Warning Symbols	Directive 67/548/EEC	Regulation (EC) No 1272/2008 (CLP)
Alkyl Dimethyl Benzyl Ammonium Chloride	CAS: 68424-85-1	1.25% W/W		C; R34 Xn; R21/22 N; R50	Acute Tox. 4; H302, H312 Skin Corr. 1B; H314 Aquatic Acute 1; H400

For the full text of the H Statements and R phrases mentioned in this section, see section 16.



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 doctor, or going for treatment

Inhalation: Move person to fresh air
If breathing is irregular or stopped, administer artificial respiration
Keep patient warm and at rest
Get medical attention if adverse health effects persist or are severe

Skin Contact: Wash contaminated skin with plenty of soap and water
Remove contaminated clothing and shoes
Continue to rinse for at least 10 minutes
If skin irritation persists avoid further exposure and get medical attention
Wash contaminated clothing before re-use

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 attention if irritation occurs

Ingestion: Wash out mouth with water
Do NOT induce vomiting unless directed to do so by medical personnel
Give small quantities of water to drink if exposed person is conscious
Get medical attention

Most Important symptoms and effects, both acute and delayed:
Irritating to skin, can cause serious eye damage

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:
Extinguishing media: Use water spray, alcohol-resistant foam dry chemical or carbon dioxide

Extinguishing Media Which Must Not Be Used For Safety Reasons:
Do not use a solid water stream as it may scatter and spread fire.

Specific Hazards Arising From the Substance or Mixture:
As the product contains organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).
Exposure to decomposition products may be a hazard to health
In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours

Special Protective Equipment for Fire Fighters:
Wear full protective clothing and self-contained breathing apparatus.

Further Information:
This material is very toxic to aquatic organisms
Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.



6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

No action shall be taken involving any personal risk or without suitable training
Keep unnecessary and unprotected personnel from entering
Do not touch or walk through spilt material
Refer to protective measures listed in sections 7 and 8

Environmental Precautions:

Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.

Methods and Materials for Containment and Cleaning Up:

Contain spillage, and then collect with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations

Dilute with water and mop up afterwards or in case of small spillage

Additional Advice: If the product contaminates rivers, lakes, soil or drains inform respective authorities.

7. HANDLING AND STORAGE

Handling:

- Avoid contact with skin, eyes and clothing
- When using do not eat, drink or smoke
- Wash hands thoroughly after work
- Do not breathe vapour or mist

Storage:

- Keep containers closed tightly in a dry, cool and well-ventilated place.
- Keep out of the reach of children
- Keep away from food, drink and animal feed stuffs
- Store in original container protected from direct sunlight
- Store between 5-40°C

Specific End Uses:

Use only as a surface biocide according to the instructions on the label



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters: Exposure Limit Values not available

Exposure Controls

Engineering Measures: Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.
The extent of these protection measures depends on the actual risks in use.
If airborne mists or vapors are generated, use local exhaust ventilation controls.
Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.
Where necessary, seek additional occupational hygiene advice.

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: No personal respiratory protective equipment normally required.
A particulate filter respirator may be necessary until effective technical measures are installed.

Hand Protection: Chemical resistant, impervious gloves should be used if a risk assessment indicates it is necessary
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough
Suitable material: PVC, Nitrile rubber

Eye Protection: Safety glasses/goggles should be used if a risk assessment indicates it is necessary to avoid splashes, mists or gases
Follow any site specific eye protection policies

Skin and Body Protection: Assess the exposure and select chemical resistant clothing based on the potential for contact and permeation/penetration characteristics of the clothing material

Hygiene Measures: Wash with soap and water after removing protective clothing
Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc)
Wear as appropriate: impervious protective suit

Environmental Exposure Controls: Steps should be taken to ensure that this product is not released accidentally into the environment



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear colourless liquid
Odour: Characteristic

Other Properties:

	Value	Temperature
pH	7.0 - 8.5	
Density	1.00 g/ml	20°C
Flashpoint	> 100 °C	
Water Solubility	Completely soluble	

10. STABILITY AND REACTIVITY

Hazardous Decomposition: Product stable under normal conditions of use and storage
Combustion or thermal decomposition will evolve toxic and irritant vapours

Hazardous Reactions: None known. Hazardous polymerization does not occur.

Conditions To Avoid: Extremes of temperature and direct sunlight
Avoid release to the environment

11. TOXICOLOGICAL INFORMATION

The toxicological data has been calculated, this product has not been tested

Acute Oral Toxicity: LD50 Median lethal dose rat, >2,000 mg/kg

Acute Inhalation Toxicity: LC50 Median lethal concentration, No data available

Acute Dermal Toxicity: LD50 Median lethal dose rat, >2,000 mg/kg

Skin Irritation: Irritating to skin. According to The Episkin reconstituted human epidermis model

Serious Eye Irritation: Causes serious eye irritation

Respiratory or Skin Sensitization: Not expected to be sensitising

Long Term Toxicity: None of the components in this product are known to be mutagenic, carcinogenic or toxic to reproduction and development

STOT- repeated exposure: None of the components in this product are known to be toxic in repeat doses



12. ECOLOGICAL INFORMATION

This product has not been tested. Toxicity data based on Benzalkonium Chloride (BAC)

Toxicity

- **Toxicity To Fish:** BAC: LC50 Median lethal concentration, 0.85 mg/l, 96h
- **Toxicity To Aquatic Invertebrates:** BAC: EC50 Median lethal concentration Daphnia, 0.02 mg/l, 48h
- **Toxicity To Aquatic Plants:** BAC: EC50 algae, 0.06 mg/l, 72h

Persistence and Degradability

- **Biodegradability:** BAC is not readily biodegradable

Mobility in Soil: No data available

Bioaccumulative Potential: BAC: Low potential, Log Pow 0.5

Results of PBT and vPvB assessment: No data available

Other Information: This product contains organically bound halogens and can contribute to the AOX value in waste water

13. DISPOSAL CONSIDERATIONS

Product: Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. 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. Triple rinse containers. The rinse water should be added to the final spray solution. It must not be put down the drain, sink or toilet. Completely empty containers can be put in the bin or disposed of in compliance with applicable local regulations. Do not reuse empty containers.

14. TRANSPORT INFORMATION

Land Transport (ADR /RID) Not dangerous goods

Sea Transport (IMDG) Not dangerous goods

Air Transport (IATA-DGR) Not dangerous goods

None special precautions for user



15. REGULATORY INFORMATION

Registration Numbers: HSE 9564
PCS 97143

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

This mixture is classified and labelled according to the CLP Regulation (EC) No 1272/2008

Contains: Benzalkonium Chloride

Chemical Safety Assessment: A Chemical Safety Assessment is not required for this mixture

16. OTHER INFORMATION

Recommended uses and restrictions: Follow the instructions

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

H302 Harmful if swallowed
H312 Harmful if in contact with skin
H314 Causes severe skin burns and eye damage
H400 Very toxic to aquatic life

Full text of R Phrases referred to under Section 3:

R21/22 Harmful in contact with skin and if swallowed
R34 Causes burns
R50 Very toxic to aquatic organisms

Full text of Classifications

- **CLP/GHS:** Acute Tox 4; Acute Toxicity, Category 4
Skin Corr. 1B; Skin Corrosion, Category 1B
Aquatic Acute 1; Aquatic Acute Toxicity, Category 1
- **DSD/DPD:** C; Corrosive
N; Dangerous for the environment
Xn; Harmful



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
PCS	Pesticide Control Service
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.