

# Safety Data Sheet (SDS) Ultima-S

# **Section 1: Identification**

Product Identifier: Ultima-S

Recommended Use: Concentrated poly(hexamethylenebiguanide)/PHMB and QAC based

disinfectant suitable for disinfecting hard surfaces, food processing equipment and footbaths. Broad spectrum and effective against

antibiotic-resistant bacteria. Biodegradable.

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## **Section 2: Hazards Identification**

## **GHS Classification**

Acute Toxicity – Oral: Category 4
Serious Eye Damage / Irritation: Category 2

## **GHS Label Elements**

# **Pictograms:**



Signal Word: WARNING

# **Hazard Statements:**

H302: Harmful if swallowed. H320: Causes eye irritation.

# **Precautionary Statements:**

P102: Keep out of reach of children.

P103: Read label before use.

P264: Wash hands thoroughly after handling.

Response:

P301 + P330 + P331: If Swallowed: Rinse mouth, Do NOT induce vomiting. P305 + P351 + P338: If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses if present and easy to do. Continue rinsing.

Storage:

P402: Store in a dry place.

P403: Store in a well-ventilated place.

Disposal:

P501: Dispose of contents / containers in accordance with Singapore regulations.

# **Section 3: Composition / Information on Ingredients**

Component Name	CAS	Composition
Polyhexamethylenebiguanide Chloride	32289-58-0	0.9%
Benzalkonium chloride	63449-41-2	4%
(Quaternary Ammonium Compound)		
Surfactant		

## **Section 4: First-Aid Measures**

#### **General Advice:**

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Seek medical advice if you feel unwell. Show this safety data sheet to the doctor in attendance.

#### Inhalation:

If inhaled, move person into fresh air and keep at rest in a position comfortable for breathing.

## **Skin Contact:**

After handling, wash hands thoroughly with soap and water.

# **Eye Contact:**

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persist, seek medical advice.

#### **Ingestion:**

If Swallowed: Rinse mouth, Do NOT induce vomiting. Seek medical advice immediately.

# **Section 5: Fire-Fighting Measures**

## **Suitable Extinguishing Media:**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## **Specific Hazards Arising From the Chemical:**

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

# **Special Protective Actions for Fire Fighters:**

In event of fire, wear self-contained breathing apparatus.

## **Section 6: Accidental Release Measures**

## Personal Precautions, Protective Equipment and Emergency Measures:

For personal protection, see section 8. Use personal protective equipment (e.g. gloves, boots) and ensure adequate ventilation

## **Environmental Precautions:**

Do not flush into surface or sanitary sewer system. If the product contaminates rivers, reservoirs or drains, inform respective authorities.

## Methods and Materials for Containment and Cleaning Up:

Soak up with inert absorbent material (e.g. sawdust). Keep in suitable, closed containers for disposal.

# **Section 7: Handling and Storage**

## **Precautions for Safe Handling:**

For personal protection, see section 8. Avoid contact with eyes, skin and clothing. Eating, drinking or smoking in work areas is prohibited. After handling, always wash hands thoroughly with soap and water. Remove contaminated clothing and protective equipment before entering eating areas.

## Conditions for safe storage, including any incompatibilities:

Keep container tightly closed and properly labelled in a dry and well-ventilated place.

# **Section 8: Exposure Controls/Personal Protection**

## **Control Parameters / Occupational Exposure Limits:**

N.A.

## **Appropriate Engineering Control Measures:**

Effective exhaust ventilation system. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Personal Protection:**

# **Respiratory Protection:**

In case of vapour formation, use a respirator with an approved filter

## **Eye Protection:**

Wear safety glasses as a minimum eye protection. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice.

# **Section 9: Physical and Chemical Properties**

Appearance at 25°C: Clear Liquid

Odour: N.A.

**Property:** 

pH: 5.5 – 8.5 (pH will be around 7 after 1:100 dilution)

Freezing point: N.A.

Initial boiling point / range: Not available

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Flashpoint: Not available Evaporation Rate: Not available

Flammability: N.A. Upper/lower flammability: N.A.

Vapour Pressure: Non volatile

Vapour Density: N.A. Relative Density: 1.0 - 1.1

Solubility in water at 25°C: Completely soluble

Partition Coefficient: N.A.

Auto-ignition temperature: Not available Decomposition temperature: Not available Viscosity: Not available

# **Section 10: Stability and Reactivity**

## Reactivity:

N.A.

## **Chemical Stability:**

The product is stable.

# **Possibility of Hazardous Reactions:**

Stable under normal conditions.

## **Conditions to Avoid:**

N.A.

## **Incompatible Materials:**

Avoid adding to soaps, will inactivate active quaternary

## **Hazardous Decomposition Products:**

No hazardous decomposition products are known.

# **Section 11: Toxicological Information**

#### Eyes:

May cause irreversible eye damage

## Ingestion:

May cause irritation to mucous membranes.

May cause gastrointestinal disturbances.

# **Section 12: Ecological Information**

## **Ecotoxicity Effects:**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

# **Persistence and Degradability**

Fully Biodegradable.

## **Bioaccumulative Potential**

The ingredients used demonstrate low potential for bioaccumulation

## **Mobility in Soil**

No available information

## **Other Adverse Effects**

N.A.

# **Section 13: Disposal Considerations**

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. The materials resulting from the clean-up operations may be hazardous wastes and therefore, subject to specific regulations. Use only licensed transporters and permitted facilities for waste disposal.

# **Section 14: Transport Information**

UN Number: N/A (not classified as hazardous) This product is not regulated under IATA/ICAO.

# **Section 15: Regulatory Information**

## **Applicable National Regulations:**

Workplace Safety and Health Act and Workplace Safety and Health (General Provisions) Regulations: This product is subject to the SDS, labelling and other requirements in the Act/Regulations. Environmental Protection and Management Act: This product is subject to the requirements in the Act/Regulations.

## Section 16: Other Information

## **Usage information**

Recommended Dilution (1 part of chemical to X parts of water)

Neat for surface sterilization

1:4 dilution for surface disinfection

1:10 dilution for surface sanitization

#### 1:50 dilution

- Equivalent to 800 ppm of QAC and 180 ppm of PHMB
- First clean surface / food processing equipment thoroughly
- Soak or spray and allow to air dry
- Suitable to be added into footbaths
- Avoid adding to soaps as the active quaternary will be inactivated

# 1:100 dilution

- Equivalent to 400 ppm of QAC and 90 ppm of PHMB
- Effective against yeast (Candida Albicans) and bacteria (Pseudomonas aeruginosa, Staphylococcus aureus, Enterococcus hirae, Escherichia coli)

#### Recommended dilution as a virucide

Neat. Effective against Highly Pathogenic Avian Influenza Virus (H5N1, Avian influenza disease)

- 1:1. Effective against Pathogenic Avian Influenza Virus (H7N1, Avian influenza disease)
- 1:2. Effective against Foot and Mouth Disease Virus
- 1:30. Effective against Vaccinia Virus (Smallpox disease)
- 1:30. Effective against Herpes Simpex Type 1 Virus (Herpes disease)

Ultima-S is compatible with multipurpose cleaner such as Refreshing Floral.

In the same mop bucket, customers can use Ultima-S at 1:100 dilution and Refreshing Floral at 1:50 dilution.

For example, in a 10-liter mop bucket, customers can add 100 ml Ultima-S and 200 ml Refreshing Floral. Then, customers can top it up with water until 10-liter mark.

**Expiry date**: 2 years from the date of production (unopened cap, intact seal, stored in normal temperature away from high heat and direct sunlight).

Date Created and Latest Revision(s)

26 March 2015: Date of issue of SDS.

29 December 2017: Updated Section 16

23 November 2018: Updated Section 1

19 January 2019: Updated Section 9

10 July 2019: Updated Section 3

21 October 2019: Updated Section 3

20 June 2020: Updated Section 3

30 September 2020: Updated Section 14

10 November 2020: Updated Section 1

**31 October 2022**: Updated Section 16

22 May 2023: Updated Section 2, Section 4, Section 8 and Section 11

28 December 2023: Updated Section 9

9 July 2024: Updated Section 1

**26 December 2024**: Updated Section 9 **15 May 2025**: Updated Section 16

## Product proudly manufactured in Singapore.

SuperSteam Asia Pacific Pte Ltd is a one-stop distributor of professional cleaning machines, janitorial supplies and cleaning chemicals. Please feel free to contact us if you have any questions on this product or face any cleaning problems.

This information is provided for the customer's investigation and independent verification. While the data is believed to be correct at time of publishing, the use of this data and of the product is beyond the manufacturer's control. SuperSteam Asia Pacific Pte Ltd shall in no event be responsible for any loss or damages whatsoever, directly or indirectly resulting from the publication or use of or reliance upon the data contained herein. No warranty, either expressed or implied, of merchantability, of fitness, or of any nature with respect to the product, or to the data, is made herein. In all cases, it is the responsibility of the user to determine the applicability of such information or the suitability of any products for their own particular purpose.

~ End of SDS ~