# Material Safety Data Sheet



2-in-1 Disinfectant & Antimicrobial

# Section 1: Chemical Product and Company Identification

Product Name: Avalon Evicate Pro 2-in-1 Disinfectant & Antimicrobial CAS No.: Mixture of water, quaternary ammonium compound Chemical Name: Not applicable Chemical Formula: Not applicable Recommended use: Disinfection using SteriTech system / electrostatic sprayer / surface disinfection

Supplier: Avalon SteriTech Limited Address: 6A-B, Man Sun Logistics Centre, 3B Hung Cheung Road, Tuen Mun, N.T., Hong Kong Phone: +852 2368 8225

# Section 2: Hazards Identification

GHS Signal word: None. Not hazardous.

## Precautionary statements

P262: Avoid contact with eyes.
P264: Wash contacted area after handling bulk products.
P281: Personal protective equipment if required
P301+P330+P331: If swallowed, rinse mouth, do NOT induce vomiting
P370+P378: Not combustible. Use extinguishing media suited to burning materials.
P410: Protect from sunlight.
P402+P404: Store in a dry area. Store in a closed container.
P403+P235: Store in a well-ventilated place. Keep cool

P501: If they cannot be recycled, dispose of contents to an approved waste disposal plant and containers to landfill

# Section 3: Composition / Information on Ingredients

Ingredient	CAS No.	% by weight
Quaternary ammonium compound(s)	68424-85-1	< 1 (Trade Secret)
Other non hazardous ingredients including water	Trade secret	> 99 (Trade Secret)

Chemical nature: Aqueous solution

# Section 4: First Aid Measures

## 4.1 Description of first aid measures

**Inhalation**: If inhaled, remove from contaminated area. Fresh air. Apply artificial respiration if not breathing.

Skin Contact: Irritation is unlikely. However, if irritation occurs, rinse skin with water.

**Eye Contact**: If in eyes, flush the eyes continously with running water for 5 minutes to wash out the products. Consult a doctor if feeling unwell. Remove contact lenses.

**Ingestion**: Immediately make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Consult a doctor immediately. Do not attempt to neutralise.

## 4.2. Notes to doctor

Treat symptomatically

# Section 5: Fire and Explosion Data

## General

The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances. This product is likely to decompose only after heating to dryness, followed by further strong heating. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

## 5.1. Extinguishing media

*Suitable extinguishing media* Non-combustible. Use extinguishing media suited to burning materials.

## Unsuitable extinguishing media

For this substance/mixture no limitations of extingushing agents are given.

## 5.2. Special hazards arising from the substance or mixture

Non-combustible material.

## 5.3. Advice for firefighting

If a significant quantity of this product is involved in a fire, call the fire brigade.

## Section 6: Accidental Release Measures

## 6.1. Personal precautions, protective equipment and emergency procedures

In case of a minor spill, dilute with water and flush to sewer. If spill in bulk, prevent spillage from entering drains or water courses. As a minimum, wear coveralls, goggles and gloves to prevent skin and eye contamination. Suitable materials for protective clothing include rubber and PVC. Eye and face protective equipment should comprise as a minimum, safety protection goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we

recommend the use of respirator. Usually, no repirator is necessary when using this product.

## 6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

## 6.3. Methods and material for containment and cleaning up

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal.

## Section 7: Handling and Storage

## 7.1. Precautions for safe handling

Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Avoid inhalation of vapour, mist or aerosols. Avoid contact or contamination of product with incompatible materials listed in Section 10.

## 7.2 Conditions for safe storage including any incompatibilities

Store in a cool place. Make sure that containers of this product are kept tightly closed. Keep containers dry. Keep away from direct sunlinght. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10.

## Section 8: Exposure Controls/Personal Protection

**Engineering Controls**: Use adequate ventilation to keep airborne concentrations low. Use process enclosure, local exhaust ventilation, or other engineering conrols to control airborne levels.

**Personal Protection in case of a Large Spill**: Wear splash-proof goggles and glovesrubber or PVC gloves. When using large quantities or where heavy contamination is likely, wear protective clothing from the PVC or rubber to minimize contact with skin.

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

Physical state	: Liquid
Color	: Colorless
Odor	: Slight odor
Boiling point	: Approximately 100 °C at 100 kPa
Freezing/Melting Point	: Approximately 0 °C

Volatiles Flammability Vapor Pressure Vapor Density Specific Gravity Water Solubility pH Volatility Odor Threshold Evaporation Rate	<ul> <li>: Water component</li> <li>: Non flammable</li> <li>: 2.37 kPa at 20 °C (water vapour pressure)</li> <li>: As for water</li> <li>: Approximately 1</li> <li>: Soluble in water</li> <li>: 6 - 8</li> <li>: No data available</li> <li>: No data available</li> <li>: As for water</li> </ul>
Evaporation Rate Explosion limits	: As for water : Non-explosive

## Section 10: Stability and Reactivity Data

**Stability**: The product is stable under ambient condition.

Instability Temperature: Not available

**Conditions of Instability**: Excess heat. Freezing. Incompatible materials. Direct sunlight.

**Incompatibilities**: Oxidizing agents. Anionic detergents. Heat. May evolve toxic gases (nitrogen oxides, ammonia, chlorides, hydrocarbons) when heat to decomposition.

**Polymerisation**: This product will not undergo polymerisation reactions.

## Section 11: Toxicological Information

## 11.1. Information on Toxicological Effects

Low toxicity and low irritant. Use safe work practices to avoid eye or skin contact and inhalation. Potential sensitising agent, although such cases are uncommon. Individuals with pre-existing respiratory impairment (e.g. asthmatics) or skin sensiticities may be more susceptible to adverse health effects. Base on information on the compnents, this material may produce the following health effect:

**Inhalation**: Material may be irritating to mucous membranes and respiratory tract. Over exposure to vapours may result in irritation of the nose and throat, coughing, nausea and headach.

**Skin Contact**: Available data indicates that this product is not harmful under normal use. Prolonged or repeated contact may result in irritation and rash, but is unlikely to cause anything more than mild discomfort which should disappear once contact ceases.

**Eye Contact**: Contact may result in irritation, pain, lacrimation and redness. Prolonged contact may result in corneal burns.

Ingestion: Swallowing may cause nausea, vomiting and gastrointestinal irritation.

## 11.2. Acute Toxicity

Inhalation: Acute toxicity estimate (based on ingredients): >20mg/L

Skin Contact: Acute toxicity estimate (based on ingredients): >2,000 mg/kg bw

Ingestion: Acute toxicity estimate (based on ingredients): >2,000 mg/kg bw

## 11.3. Additional Health Effect

Carcinogenicity: No significant ingredient is classified as carcinogenic.

# Section 12: Ecological Information

No data available.

## Section 13: Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with local, regional, national and international Regulations. Prevent contamination of drains or waterways.

# Section 14: Transport Information

This product is not classified as a Dangerous Good by International Air Transport Association (IATA) or International Maritime Dangerous Good Code (IMDG) criteria. No special transport conditions are necessary unless required by other regulations.

# Section 15: Other Regulatory Information

This material is not subjected to the following international agreements: Basel Convention (Hazardous Waste) Montreal Protocol (Ozone depleting substances) International Convention for the Prevention of Pollution from Ships (MARPOL) The Rotterdam Convention (Prior Informed Consent) The Stockholm Convention (Persistent Organic Pollutants)

# Section 16: Other Information

When used in low concentrations there is little local or systemic toxicity.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.