

## Safety Data Sheet (SDS) QAC Kleen

### Section 1: Identification

Product Identifier:	QAC Kleen
Recommended Use:	Concentrated QAC disinfectant cleaner for wiping, spraying and fogging. With QAC disinfectant suitable for disinfecting and sanitizing hard surfaces, food processing equipment etc. It is also able to kill bacteria and viruses. Contains Benzalkonium Chloride and can be diluted up to 100 parts water to give 800 ppm of QAC for disinfection. Biodegradable.
Supplier:	Consolidated System(S) Pte Ltd 38 Tuas View Loop Singapore 637695 Tel: +65 6861 6328 (Mon-Fri 8:30am – 5:30pm) Fax: +65 6861 3237 Email: sales@consolidatedsystem.com.sg

### Section 2: Hazards Identification

#### GHS Classification

Skin Corrosion / Irritation	Category 2
Acute Toxicity - Oral	Category 4
Serious Eye Damage / Irritation	Category 2

#### GHS Label Elements

##### Pictograms:



**Signal Word:** Warning

##### Hazard Statements:

H302 + H312:	Harmful if swallowed or in contact with skin.
H315 + H320:	Causes skin and eye irritation.

##### Precautionary Statements:

P102:	Keep out of reach of children.
P103:	Read label before use.
P264:	Wash hands thoroughly after handling.

P280: Wear protective gloves.

**Response:**

P301 + P330 + P331: If Swallowed: Rinse mouth, Do NOT induce vomiting.

P303 + P361 + P353: If on Skin: Remove/take off immediately all contaminated clothing. Rinse skin with water / shower.

P352: (After handling) Wash hands thoroughly with soap and water.

P363: Wash contaminated clothing before reuse.

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
Benzalkonium Chloride	63449-41-2	8%
Non-ionic Surfactant		<2%
Salts of EDTA	64-02-8	<2%

### 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. If on skin, remove/take off immediately all contaminated clothing. Rinse skin with water / shower. Wash contaminated clothing before reuse

**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 persists, 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. Avoid contact eyes and skin.

### **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, earth). Keep in suitable, closed containers for disposal. Disposal according to local regulations.

## 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 and accurately labelled in a dry and well-ventilated place.

### **Directions for Fire and Explosion Protection:**

Do not store with oxidants or explosive materials.

## 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

**Skin Protection:**

Wear chemical resistant gloves such as Nitrile Rubber Gloves / PVC Gloves. Also recommended to wear chemical resistant safety boots. Always decontaminate your PPE after every use.

**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:	Characteristic
pH:	7.1 (+/- 1)
Freezing point:	Not applicable and/or not determined for this mixture
Initial boiling point / range:	Not applicable and/or not determined for this mixture
Flashpoint:	Not applicable and/or not determined for this mixture
Evaporation Rate:	Not applicable and/or not determined for this mixture
Flammability:	Not applicable and/or not determined for this mixture
Upper/lower flammability:	Not applicable and/or not determined for this mixture
Vapour Pressure:	Non volatile
Vapour Density:	Not applicable and/or not determined for this mixture
Relative Density:	1.001
Solubility in water at 25oC:	Completely soluble
Partition Coefficient:	Not applicable and/or not determined for this mixture
Auto-ignition temperature:	Not applicable and/or not determined for this mixture
Decomposition temperature:	Not applicable and/or not determined for this mixture
Viscosity:	Not available

## Section 10: Stability and Reactivity

**Reactivity:**

N.A.

**Chemical Stability:**

Product is stable

**Possibility of Hazardous Reactions:**

Product is stable under normal conditions

**Conditions to Avoid:**

N.A.

**Incompatible Materials:**

N.A.

**Hazardous Decomposition Products:**

No hazardous decomposition products are known. Burning can produce carbon dioxide and carbon monoxide as with any materials.

**Section 11: Toxicological Information****Inhalation:**

Inhalation may cause irritation to mucous membranes. May cause nausea. May cause headaches.

**Skin:**

May cause skin irritation in susceptible persons.

Skin inflammation is characterized by itching, scaling, reddening or occasionally, blistering.

Effect will depend on concentration and length of time of exposure

**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 Considerations**

UN Number: N/A (not classified as hazardous)

This product is not regulated under transport regulations.

## **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**

Benzalkonium Chloride is known to be effective in killing bacteria and enveloped viruses; Gram-positive bacteria, some Gram-negative bacteria, some enveloped viruses, fungi, yeasts and protozoa

1:20 dilution – Results in 0.4% QAC, 4000 ppm. Suitable for hand sanitization with QAC Benzalkonium Chloride.

1: 50 dilution – Results in 0.16%, 1600 ppm. QAC content. Suitable for spraying, misting, wiping of food processing equipment, surfaces, foot baths etc. Avoid adding to soaps as active quaternary will be inactivated

1: 100 dilution – Results in 0.08%, 800 ppm QAC content. Suitable for spraying, misting, wiping of food processing equipment, surfaces etc. Avoid adding to soaps as active quaternary will be inactivated

Effective against the following bacteria: *Listeria monocytogenes*, *Bacillus cereus*, *Staphylococcus aureus*, *Staphylococcus typhimurium*, *Pseudomonas aeruginosa*, *Escherichia Coli*

### **Cleaning**

For hard surface disinfecting, apply with sprayer, cloth, mop or by machine scrubbing.

## **Fogging**

Please observe the following steps and safety precautions for fogging:

1. Remove all absorbent material such as fabric from room being fogged
2. Use power supply from a point outside the area
3. Enclose room as much as possible and stop all mechanical ventilation
4. Ensure room is completely vacated during fogging process
5. User should wear protective mask and clothing while fogging and until fog disperses
6. Fogging should continue until moisture starts to form on walls and other surfaces
7. After fog disperses, leave to dry or wipe off using cloth or disposable paper

Speak to your sales representative for a suitable fogging machine

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## **Product proudly manufactured in Singapore.**

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

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**End**