

日本厚生省認証



超除菌消臭×飲料水レベルの安心

SYUFRE  
**シュフレ QUICK**

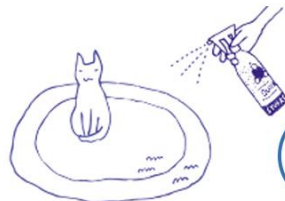
[食品添加物認定成分 シュフレ クイック]

**即時除菌消臭噴劑**

個人消毒防護対策



クルマのニオイも  
ちやんと消えます。



金属腐食  
しにくい

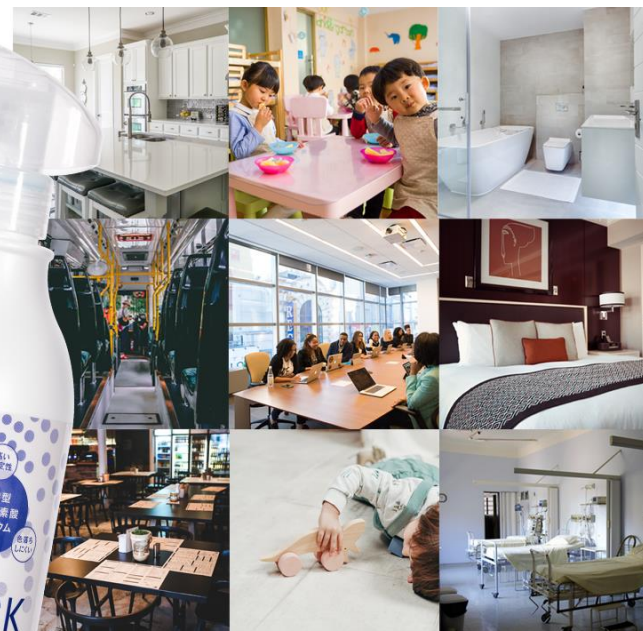
高い  
安全性

安定型  
次亜塩素酸  
ナトリウム

色落ち  
しにくい

除菌・消臭スプレー  
**QUICK**  
シュフレ クイック

 **SYUFRE**



日本製 Made in Japan

Managed by Bonkit

## Stabilized Sodium Hypochlorite (SSH)

穩定型次氯酸鈉（日稱安定型次亞塩素酸）

This product is recognized as a food additive by the Japanese Ministry of Health, Labour and Welfare (MHLW). Sodium hypochlorite has disinfecting attributes recognized in the medical field. Stabilized Sodium Hypochlorite (SSH) is modified sodium hypochlorite which can resolve certain issues related to the previous versions of sodium hypochlorite. SSH is applicable to the “five disinfection methods against infection” designated by MHLW. In addition, it causes no harm to human beings and the environment. SSH has an extended shelf – life if stored properly. SSH overcomes many issues, including the inflammability and toxicity of alcohol-based products, the smell of chlorine dioxide and stabilized chlorine dioxide, release of chlorine due to chemical reaction, and corrosion and bleaching of metals. This product could immediately inactivate bacteria and virus upon contact as an effective disinfectant. When it comes to removing odor, it is effective against many types of smells, including tobacco, elderly smell and ammonia. Instead of temporarily suppressing the smell or covering up smells like common deodorizers, it effectively decomposes and removes the “eight bad odors” defined by the Ministry of Environment. With its non-irritant and harmless nature, it could be applied to dermatitis, cuts or scratches without causing irritation. It could also be safely used by children and the elderly.

本產品得到日本厚生勞動省（MHLW）認可為食品添加劑。次氯酸鈉具有消毒特性，獲醫學領域公認。穩定的次氯酸鈉（SSH）由次氯酸鈉改造而成，解決了許多以前版本的次氯酸鈉出現的相關問題。SSH適用於MHLW指出的“針對感染的五種消毒方法”。此外，它對人類和環境均無害。SSH具有較長的保質期和壽命。SSH克服了許多問題，包括酒精類產品的易燃性和毒性、二氧化氯和穩定型二氧化氯的氣味、因化學反應釋放的氯以及金屬腐蝕和漂白。SSH的消毒效果顯著，接觸其他物質時，能夠隨即制止細菌和病毒活動。去除異味方面，它能有效去除多種氣味，包括煙草、老人氣味和氨氣。SSH不會像普通除臭劑般只暫時抑制氣味或掩蓋氣味，它可以有效分解並消除日本環境部定義的“八種不良氣味”。SSH既無刺激性又無害，可用於皮膚炎、割傷和刮傷，也可以放心給予兒童和老人家使用。

## Main characteristic

---

### ① Disinfection Effect

Disinfect by free chlorine

+

Decompose of protein of alkali

+

Non-volatile effect

(sodium Hypochlorite attributes)

(Antiseptic soap or soap attributes)

(Not attributes of Alcohol based or chlorinated product)

### ② Modification from Chlorinated product

Corrosive to Metal Fabrics

→ **Non - Corrosive**

In contact with Living  
Organisms

→ **Not applicable**

Strong Chlorine Smell

→ **Nearly Odorless**

Storage Period

→ **Over 1year**

Toxicity and hazard in Vapor

→ **Not applicable**

Oral Toxicity / Endotracheal  
toxicity

→ **Not applicable**

## Characteristic of the product

---

### Strong deodorizing characteristic

Besides common tobacco, elderly smell, ammonia smell, it instantly removes bad smell from raw garbage and the 8 bad smell defined by Ministry of Environment.

Decompose the organic substance of microorganism and effectively remove their smell as well as organic solvent of hair perm. At the same time, it could be sprayer to remove the smell scattered in the air.

#### ● Also effective in removing below smell

- Ammonia (Toilet, Rotten Meat)
- Trimethylamine (Rotten fish)
- Methyl mercaptan (Rotten vegetable)
- Methyl disulfide (Rotten vegetable)
- Elderly
- Hydrogen Sulfide (Toilet, Rotten egg and vegetable)
- Styrene (Burning plastic)
- Methyl sulfide (Rotten vegetable)
- Acetaldehyde (Tobacco)
- Diaper
- Foot
- Pet
- Dirty Clothing
- etc...

#### Mechanism of Odor Removal

Inactivate and kill the unwanted bacteria in the sweat component which cause bad smell, resulting in odorless environment. Also urea in bad smell substances consume and combine with chlorine, producing nitric acid ion and decomposing urea. Ammonia is finally decomposed and become monochloramine, an odorless substance.

Hydrogen sulfide emitted from origin of rotten smell is oxidized to sulfur, water and sodium chloride, turning it odorless. Acetaldehyde emitted from origin of garbage is reduced and decomposed, changing it become odorless.

## Characteristic of the product

---

### Strong Instant removal bacteria

“Stabilized Sodium Hypochlorite” instantly inactivate virus and bacteria by decomposition of the protein component. Its anti-bacterial function is proven to effective in seasonal influenza, SRAS virus, parvovirus in animals, norovirus and O-157 in food poisoning.

In addition, with the effective chlorine concentration for antibacterial properties, “Stabilized Sodium Hypochlorite” could instantly kill over 99.9% of bacteria. “Stabilized Sodium Hypochlorite” is effective in dealing with airborne virus, virus attached to materials, or virus floating around, thus making it effective for infection prevention.

#### ● Adapted bacteria and Virus (Main Example)

- |                           |                          |                   |                      |
|---------------------------|--------------------------|-------------------|----------------------|
| • Salmonella              | • O-157                  | • Influenza       | • Chlamydia          |
| • Vibrio parahaemolyticus | • Pseudomonas aeruginosa | • Herpes1.2       | • Campylobacter      |
| • Serratia marcescens     | • E.Coli                 | • MRSA            | • Coxsackie virus B8 |
| • Staphylococcus aureus   | • SARS virus             | • Poliovirus      | • Norovirus          |
| • Trichophyton fungus     | • Legionella pneumophila | • Newcastle virus | • HIV virus          |
|                           |                          |                   | • Hepatitis virus    |

## Characteristic of the product

---

### ● Inactivation Test on Virus (Institute Stock Raising Biological Science Security)

Testing Time (mins)		Virus Unit PPU/ml	0min	1min	3min
Influenza Virus	Control	Average	$5.83 \times 10^4$	$1.05 \times 10^5$	$9.00 \times 10^4$
		Log	4.77	5.02	4.95
	Testing	Average	$<10^2$	$<10^2$	$<10^2$
		Log	$<2.00$	$<2.00$	$<2.00$
		LRV	$<2.8$	$<3.0$	$<3.0$
		% Decrease	99.72%	99.90%	99.90%
Coronavirus	Control	Average	5.4	5.3	5.5
	Testing	Average	$\leq 1.50$	$\leq 1.50$	$\leq 1.50$
		LRV	$\leq 3.9$	$\leq 3.9$	$\leq 3.9$
		% Decrease	99.98%	99.97%	99.99%
Parvovirus	Control	Average	5.7	5.8	5.7
	Testing	Average	3.4	$\leq 1.50$	$\leq 1.50$
		LRV	2.3	$\leq 4.2$	$\leq 4.2$
		% Decrease	99.27%	99.27%	99.99%

## Characteristic of the product

### ●Antibacterial test for Virus (Japan Food Research Laboratoriws)

Testing Result of bacterial count in “1ml” of testing sample (100mg/L)

Bacteria		O-157	VRE	Legionella	Listeria	Pseudomonas aeruginosa	Salmonella
Bacterial Count (/ml)	Beginning	$1.3 \times 10^5$	$1.1 \times 10^5$	$2.7 \times 10^7$	$6.5 \times 10^5$	$1.0 \times 10^5$	$6.8 \times 10^5$
	After 15secs	>10	>10	$5.0 \times 10^5$	>10	>10	>10
	After 30secs	>10	>10	$1.6 \times 10^3$	>10	>10	>10
	After 60secs	>10	>10	>100	>10	>10	>10

Bacteria		Staphylococcus Aureus	Staphylococcus epidermidis	Streptococcus	Vibrio parahaemolyticus	MRSA
Bacterial Count (/ml)	Beginning	$3.2 \times 10^5$	$7.3 \times 10^5$	$6.7 \times 10^5$	$4.6 \times 10^5$	$1.4 \times 10^6$
	After 15secs	>10	$2.3 \times 10^5$	>10	>10	>10
	After 30secs	>10	>10	>10	>10	>10
	After 60secs	>10	>10	>10	>10	>10

>10 : Not detect

## Characteristic of the product

---

### Noncorrosive / Non bleaching

Due to its weak alkali nature (pH10.5 - 12.0), its non-corrosiveness enable it be safely use in fabric, dedicated machinery and metals.

If proven by reliable testing centers that the product's non-corrosive nature towards metal is as safe as purified water. (avoid electronic parts)

Also as it does nor bleach, it could be safely use in colored fabric without concerning the applied fabric will be bleached out.

### Odorless

When using alcohol based or chlorine based disinfectant, there is unique bad smell or chlorine smell similar to those found in swimming pools. However

“Stabilized Sodium Hypochlorite” is odorless and is highly applicable to many situation as it is not added with any fragrance.

### Non-volatile

Unlike alcohol based product which is volatile and cause rough and allergic skin reaction, “Stabilized Sodium Hypochlorite” is non-volatile and non-irritant.

Also, it remains effective until it vaporizes.

Unlike chlorine based product which is volatile causing degradation of the effective chlorine concentration, “Stabilized Sodium Hypochlorite” is non-volatile and is stable be used for long period time without degradation of chlorine concentration.



## Characteristic of the product

---

### Safety

“Stabilized Sodium Hypochlorite” is recognized safe as food additive. After decomposing bacteria and virus, the product will be water and oxygen, which is safe to both human and environment.

Even if it is consumed accidentally, it has no harm to human health. It causes no adverse effect of inflammation on skin.

Because it does not cause inflammable concern like alcohol, toxic gas by-product like chlorine based product, or emit any hazardous reactive oxygen which could threaten human health, it is regarded as a safe product.

It does not impose adverse affect to environment even though it is discarded into sewage.

#### ● Safety Test Tokyo Food Institute of Technology

- Mouse acute toxicity test (Oral)
- Mouse local site acidity examination (ocular mucous membrane)
- Mouse local site acidity examination (Skin)

→ **No bad effect**

#### ● Safety Test by Japan Food Research Laboratories

- Eyes stimulation examination of rabbit → Non-irritant
- The first skin stimulation examination of rabbit → Non-irritant
- Acute toxicity test on rabbit (Oral, Endotracheal) → No bad effect

# Testing Reports and Data

## Food Additive Test



## Bacterial and Virus Inactivation Test



## Metal Corrosiveness Test



## Safety Test



## Disinfectant Contents

---

Stabilized Sodium Hypochlorite (Approved Food Additives)

pH value (Measured by Glass Electrode Method) : 12.0 weak alkaline \*Japan Food Research Laboratories

## Storage Condition

---

Before opening : Over 2 years / After opening : About 1 year \*Keep in dark and cool area within 5°C to 40°C

## Caution for Application

---

- It is not effective when used under high-temperature area such as sauna. Refrain from using in these areas.
- Store in room temperature and avoid freezing levels, extreme heat, and UV.
- Refrain from using aluminum products.
- Refrain from direct oral intake.
- Use according to instructions.

## 相關測試報告

---

日本文科省:

# 「次亜塩素酸水」子どもいる空間で噴霧しない よう通知 文科省

2020年6月5日 20時18分

新型コロナウイルス

新型コロナウイルスの消毒目的で学校などで利用されている「次亜塩素酸水」について、文部科学省は現時点で有効性がまだ十分確認されていないとして、子どもたちがいる空間では噴霧器での散布などは行わないよう教育委員会などに通知しました。

通知では、学校の物品を消毒する際には、新型コロナウイルスへの有効性が示されている消毒用エタノールや、次亜塩素酸ナトリウム消毒液、さらに、一部の界面活性剤を含む家庭用洗剤の使用を求めています。

一方で、一部の学校などで使われている「次亜塩素酸水」は次亜塩素酸ナトリウム消毒液とは異なり、有効性はまだ十分確認されていないとして、子どもたちがいる空間では噴霧器での散布などは、健康面への配慮から、行わないよう求めています。

文部科学省は「場所や状況に応じて適切に対応してほしい」としています。

## 日本厚生省:

### 7) 環境消毒

新型コロナウイルス感染症が確定または疑われる患者の周辺の高頻度接触環境表面や、患者の皮膚に直接接触した器材（血圧計や体温計）は、アルコール（濃度60%以上）や次亜塩素酸ナトリウム溶液（濃度0.1%～0.5%）を用いて清拭消毒します。患者の皮膚と直接接触する器材の使用は必要最小限にとどめましょう。

消毒薬の噴霧は行いません。また、床や壁などを含む大掛かりかつ広範囲の消毒は不要です。患者が不在の場合、環境消毒を行うスタッフは手袋とガウンを着用します。無症状の濃厚接触者が触れたモノや環境表面の消毒は不要です。

### 問2 家族に新型コロナウイルスの感染が疑われる場合に、家庭でどんなことに注意すればよいでしょうか。

ご本人は外出を避けてください。ご家族、同居されている方も熱を測るなど、健康観察をし、不要不急の外出を避け、特に咳や発熱などの症状があるときには、職場などには行かないようにしてください。

ご家族に新型コロナウイルスの感染が疑われる場合には、同居されているご家族は以下の8点にご注意ください（詳しくは、一般社団法人日本環境感染症学会とりまとめをご参照ください。）。

※家庭用塩素系漂白剤は、主成分が次亜塩素酸ナトリウムであることを確認し、濃度が0.05%（製品の濃度が6%の場合、水3Lに液を25mℓ）になるように調整してください。トイレや洗面所は、通常の家計用洗剤ですすぎ、家庭用消毒剤でこまめに消毒しましょう。タオル、衣類、食器、箸・スプーンなどは、通常の洗濯や洗浄でかまいません。感染が疑われる家族の使用したものを分けて洗う必要はありません。洗浄前のものを共有しないようにしてください。特にタオルは、トイレ、洗面所、キッチン

衛生防護中心:



衛生防護中心  
Centre for Health Protection

感染控制處

漂白水的使用

漂白水是一種強而有效的消毒劑，其主要成分是次氯酸鈉 (Sodium hypochlorite)，能使微生物的蛋白質變質，有效殺滅細菌、真菌及病毒。家用漂白水價錢廉宜，功效快速，因此，市民可使用稀釋的家用漂白水來消毒環境。

# 星加坡國家環境局

Table 2. Active Ingredients and their Working Concentrations Effective Against Coronaviruses

	Active Ingredient (A.I.)
1	<b>Sodium hypochlorite (0.1 – 0.5%)<sup>1</sup></b>
2	
3	Povidone-iodine (1% iodine) <sup>1</sup>
4	Chloroxylenol (0.24%) <sup>2</sup>
5	50% isopropanol <sup>3</sup>
6	0.05% benzalkonium chloride <sup>3</sup> (Quaternary Ammonium Compound)
7	50ppm iodine in iodophor <sup>3</sup>
8	0.23% sodium chlorite <sup>3</sup>
9	1% cresol soap <sup>3</sup> (sodium alkyl-ben-zene sulfonate)
10	Hydrogen peroxide (0.5-7.0%) <sup>4</sup>

Interim List of Household Products and Active Ingredients for Disinfection of the COVID-19 Virus

Singapore National Environment Agency, (2020)

<https://www.nea.gov.sg/our-services/public-cleanliness/environmental-cleaning-guidelines/guidelines/interim-list-of-household-products-and-active-ingredients-for-disinfection-of-covid-19>

Table 1. Active Ingredients and Their Working Concentrations Effective Against Coronaviruses

S/N	Active Ingredient (A.I.)	Contact Time (min)
1	Accelerated hydrogen peroxide <sup>#</sup> (0.5%) <sup>a</sup>	1
2	Benzalkonium chloride* (0.05%) <sup>b</sup>	10
3	Chloroxylenol (0.12%) <sup>c</sup>	10
4	Ethyl alcohol (70%) <sup>d</sup>	10
5	Iodine in iodophor (50 ppm) <sup>b</sup>	10
6	Isopropanol (50%) <sup>b</sup>	10
7	Povidone-iodine (1% iodine) <sup>d</sup>	1
8	<b>Sodium hypochlorite (0.05 – 0.5%)<sup>d, e</sup> or Active chlorine generated from other precursor(s)<sup>1</sup> (ca. 0.476-4.762 g/L of available chlorine)</b>	<b>5</b>

\*Alternative name: alkyl dimethyl benzyl ammonium chloride

<sup>#</sup>Products with hydrogen peroxide as the active ingredient will be assessed on a case-by-case basis; efficacy reports should be provided by the supplier.

<sup>1</sup>Active chlorine could be generated from other precursors such as calcium hypochlorite, hydrochloric acid, sodium chloride, sodium

Sodium hypochlorite required a minimal concentration of at least 0.21% to be effective.

contacting. Within 10 min a concentration of 0.2% revealed no efficacy against coronavirus whereas a concentration of 0.05% was quite effective. 0.02% chlorhexidine digluconate was basically ineffective (Table II).

### *Inactivation of coronaviruses by biocidal agents in carrier tests*

Ethanol at concentrations between 62% and 71% reduced coronavirus infectivity within 1 min exposure time by 2.0–4.0  $\log_{10}$ . Concentrations of 0.1–0.5% sodium hypochlorite and 2% glutardialdehyde were also quite effective with  $> 3.0 \log_{10}$  reduction in viral titre. In contrast, 0.04% benzalkonium chloride, 0.06% sodium hypochlorite and 0.55% ortho phtalaldehyde were less effective (Table III).

### Discussion

Human coronaviruses can remain infectious on inanimate surfaces at room temperature for up to 9 days. At a temperature of 30°C or more the duration of persistence is shorter

hands either, after patient contact or after touching contaminated surfaces. The WHO recommends to preferably apply alcohol-based hand rubs for the decontamination of hands, e.g. after removing gloves. Two WHO recommended formulations (based on 80% ethanol or 75% 2-propanol) have been evaluated in suspension tests against SARS-CoV and MERS-CoV, and both were described to be very effective [14]. No in vitro data were found on the efficacy of hand washing against coronavirus contaminations on hands. In Taiwan, however, it was described that installing hand wash stations in the emergency department was the only infection control measure which was significantly associated with the protection from healthcare workers from acquiring the SARS-CoV, indicating that hand hygiene can have a protective effect [15]. Compliance with hand hygiene can be significantly higher in an outbreak situation but is likely to remain an obstacle especially among physicians [16–18]. Transmission in healthcare settings can be successfully prevented when appropriate measures are consistently performed [19,20].

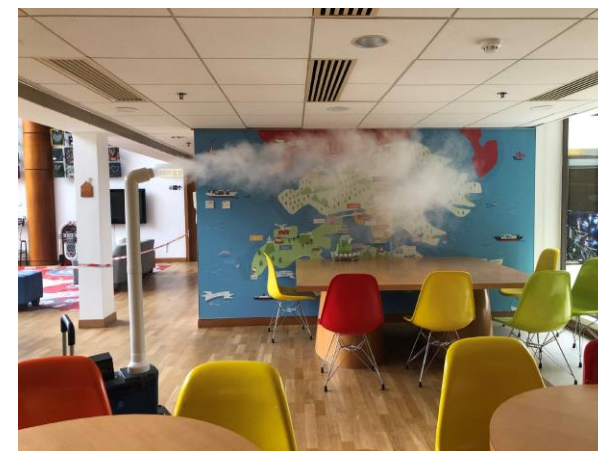
Human coronaviruses can remain infectious on inanimate surfaces for up to 9 days. Surface disinfection with 0.1% sodium hypochlorite or 62–71% ethanol significantly reduces coronavirus infectivity on surfaces within 1 min exposure time. We expect a similar effect against the SARS-CoV-2.

[Kampf, G., Todt, D., Pfaender, S., & Steinmann, E. \(2020\). Persistence of coronaviruses on inanimate surfaces and its inactivation with biocidal agents. Journal of Hospital Infection.](#)



## 預防疾病感染

室內環境：有效去除喻味、煙味、甲醛，亦可噴灑在地毯、沙發、窗簾布等布製品上作除嗅、防止霉菌滋生。



## 防止食物中毒對策

**廚房：** 可對付因食物腐爛或垃圾等產生的難聞氣味。對砧板、廚房用品、餐具、冰箱等具除菌功效。



**廁所：** 能去除廁所殘留的討厭臭味。同時還能殺滅空氣中的細菌和病毒，令空間保持衛生。



## 預防疾病感染

室內環境：能殺滅冷氣機過濾網內的細菌，同時也可防止霉菌滋生。

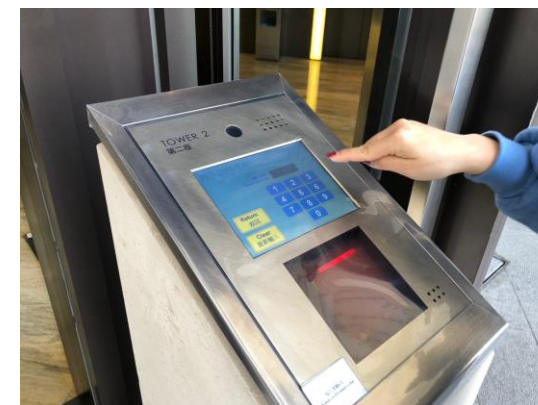


## 預防疾病感染

**人流頻密:** 座位、椅背、扶手、冷氣口、窗簾要多加注意，以防止病毒間接散播。



## 不同地方的使用建議





[www.syufre.com.hk](http://www.syufre.com.hk)