

Disinfectant Solutions Provider Life Sciences & Healthcare







Why Hydro-E HOCl?

- 99.9% Effective antibacterial disinfectant (surface and airborne)
- <u>Non-toxic/non-flammable</u>
- Residue free, tasteless, odourless, odour eliminating
- Baby/Child, pet, allergy, and ECO friendly
- Eliminates COVID-19 faster than alcohol and bleach based sanitisers
- Eliminates wider range of bacteria, fungus, and infection types than alcohol and bleach
- **pH neutral/water based** (pH level 7, won't dry out skin or leave residue, smell or taste like alcohol and bleach)
- Used by <u>Coca-Cola</u> Poland to disinfect/sanitise recycled glass (replacing the bleach and UV treatment process)
- Broad spectrum of application Used as a surface cleaner, in meat/produce /food manufacturing, medical equipment sanitiser, non-corrosive coolant, and much more...



Approvals & Certifications







Department of Health Therapeutic Goods Administration

Australian Register of Therapeutic Goods Certificate

Issued to

Signac Group Pty Ltd

for approval to supply

Signac Group Pty Ltd - Hydro-E Hospital Grade Disinfectant -Disinfectant, hospital grade

ARTG Identifier	335971
ARTG Start Date	7/05/2020
Product Category	Other Therapeutic Good Other Therapeutic Good - Listed disinfectant
Intended Purpose	Hydro-E is a hard surface disinfectant which is effective against germs and a broad range of bacteria including staphylococcus aureus (MRSA), VRE, CPE/CRE, Salmonella and Acinetobacter. Not to be used on skin. Not to be used on medical devices or other therapeutic goods.

Manufacturer Details	Address	Certificate number(s)
Signac Group Pty Ltd		
	Australia	

ARTG Standard Conditions

The above Other Therapeutic Good Other Therapeutic Good - Listed disinfectant has been entered on the Register subject to the following conditions:

 Conditions applicable to all therapeutic goods as specified in the document "Standard Conditions Applying to Registered or Listed Therapeutic Goods Under Section 28 of the Therapeutic Goods Act 1989" effective 1 July 1995.

Conditions applicable to the relevant category and class of therapeutic goods as specified in the document "Standard Conditions Applying to Registered or Listed Therapeutic Goods Under Section 28 of the Therapeutic Goods Act 1989" effective 1 July 1995.

Products Covered by This Entry

1. Hydro-E Hospital Grade Disinfectant - Disinfectant, hospital grade

Product Specific Conditions

No specific conditions have been recorded against this entry.



KR Biotech Co., Ltd. Institute of Infectious Disease Control (BSL3 No. KCDC-09-3-01)

H Neungdong-ro 120, Konkuk university Bld#12, Rm 406, Kwangjin-gu, Seoul

Test Report

	Name	SeouLin Bioscience Co.,	Ltd. Te	l. No.	82-1670-5911
Client	Representative	Eul-Moon, Hwang		mail	ecoTree@seoulin.co.kr
	Address	4F. #A, KOREA BIO PARK, 700, Daewangpangyo-ro, Bundar Seongnam-si, Gyeonggi-do, Republic of Korea			
Request	Virucidal Activ	ity Test			
Sample	Hydro-E,ecoTr	ee SLB-120 Sterilization W	ater Generat	tor	
Purpose of Use on the Product	Slightly acidic I Sterilization, D	hypochlorous acid water (p isinfectant	H 5.0~6.5 / 3 Test Period	30~40pp d 2	om) 2020.06.18-07.10
Test Virus	COVID-19 (SA	RS-CoV-2)	Cell Line		Vero E6
Test No.	KR-2006-016-9	SLB01-C	Testing met	thod	ASTM E1052-11
Sample State	Liquid: Colorle	Colorless, transparent		ion	Stock solution
Reaction Time	30 sec, 1 min, 5	min	Titration		CPE
Test Temperature	Room Tempera	ture (Approx. 20°C)	Tester		Hansam Cho 🖊

Test Result

Dec de ca Nicera	Virus Titer	T	Virus Reduction Rate		
Product Name	TCID ₅₀	I reatment time	(log)	(%)	
	3.16x10 ⁶	30 sec	≥ 3.33	99.95%	
ecoTree SLB-120	3.16x10 ⁶	1 min	≥3.50	99.97%	
(ecoTree <mark>,Hydro-E)</mark>	3.16x10 ⁶	5 min	≥4.00	99.99%	

Result: ecoTree SLB-120 Sterilization Water Generator (ecoTree,Hydro-E) used in the test showed 99.95% effect after of virucidal 30 seconds of sample treatment on COVID-19 (SARS-CoV-2).





* This test report is a result limited to the sample and sample name provided by the client and does not guarantee the quality on the overall product.
* This report cannot be used for PR, advertising and litigation purposes, and use of this report other for its original purpose is prohibited.

Kills Covid-19 (SARS-CoV-2) in 30 s econs 99.95%



HOCI (Hypochlorous acid)

It is natural and highly-effective component of our internal immune system that works to fight against infection and control the healing process.

HOCI eliminates harmful micro-organisms without the use of alcohol, ammonia, phosphates or other harmful chemicals.



PHAGOCYTOSIS & OXIDATIVE BURST





Sterilization Range



HOCI is a highly effective when it comes to eliminating spore-forming bacteria

HOCI can eliminate a wider range of harmful viruses, germs and bacteria. (total 12 species)

Sterilization Power

Comple		Sterilization Power (%))
Sample	Escherichia coli	Bacillus cereus	Listeria monocytogenes
Hydro-E HOCI	99.99	99.99	99.99
NaOCI_100 ppm	Under 60	-	-
Ethanol 70%	99.99	99.99	99.99

Hydro-E HOCI has sterilizing power equal to or greater than NaOCI and ethanol for pathogenic food poisoning microorganisms such as *Escherichia coli, Bacillus cereus, Listeria monocytogenes.*



Toxicity & Risk Comparison

Substance	Cas No.	Flash Point (°C)	Acute Toxicity Oral	Ocular mucosa Irritation	Exposure Criteria (South Korea)
Hydro-E HOCl	7790-92-3	No data	Non-toxic or very weak	Non-irritation	No data
75% Ethanol	64-17-5	13.0	Highly-toxic	Slightly-irritation	*TWA 1,000 ppm
59% Ethanol	64-17-5	22.2	Highly-toxic	Slightly-irritation	TWA 1,000 ppm
NaOCI	7681-52-9	No data	Highly-toxic	Strongly-irritation	No data

Hydro-E HOCI is a non-flammable, non-toxic and non-irritative sterilizer.







Public Institutions			Food Industry					P.8.D	
Public Institutions		Food Service		НАССР			NGD		
Industrial Safety	Living Safety	Public Safety	Food Service	Kitchen	Sea Food	Agriculture	Food Processing	Animal	Laboratory
Environmental Sanitization	Hand Sanitizer Disinfectant	Health Care Hospital Age Care	School Company Army	Kitchen Sterilizer	Jaymarine Inc.	Daehyang Corp.	Dongsung Food Inc.	Research Dissection Experiment	Replace Ethanol

HOCI has a broad application for cleaner and healthier lifestyles







Other packaging options available for

Wholesale | Bulk Purchase | Local Agent | On-site Generation









4.61±.0.17 log₁₀cfu/m³



0.73±0.20 log₁₀cfu/m³ Reduction 99.99%



1.20±0.14 log₁₀cfu/m³ Reduction 99.96%



0.10±0.17 log₁₀cfu/m³ Reduction 99.99%

residual test by indoor spray with HYDRO-E and other Chemicals



Test condition	 space; 20 M spray quant gas measur 	M ³ 2) ventilation; none ntity; 4 liter/h urement; Gastech Gas tester					
Test result	concentration (ppm)	After 30 min (ppm)	After 1 hour (ppm)	Remark			
	500(Bleach)	0.10	0.10	_			
	200 (Bleach)	0.02	0.07	_			
	100 (High Acid HOCI)	0.01 below	0.01	_			
	50 (Hydro-E)	0.01 below	0.01 below Normal condition				
consideration	International environmental tolerance of chlorine gas is 1 ppm, Normal condition rate is 1/100 of standard. Thus, safe for human. * ACGIH (American Conference of Governmental Industrial) TLV-TWA (Time loaded average) ; 1 ppm TLV-STEL (Instant exposure limit) ; 3 ppm						



International Certification

1) USA, United States Department of Agriculture(USDA)

The USDA's Food Safety and Inspection Service Directive 7120.1 " Safe and Suitable Ingredients Used in the Production of Meat and Poultry Products", has approved the use of <u>electrolytically generated hypochlorous acid</u> as a food additive for use on meat and poultry products. (USDA, 2008)

2) USA, Food and Drug Administration(FDA)

FCN 1811 for use of hypochlorous acid, (CAS Reg. No. 7790-92-3), where free available chlorine(FAC) will not exceed

60ppm, as an antimicrobial agent in an aqueous solution in the production and preparation of whole or cut meat and poultry; processed and preformed meat and poultry; fish and seafood; fruits and vegetables; and shell eggs.

3) Japan, Ministry of Health, Labour and Welfare

The substances below are the designated additives appearing in Table 1, as mentioned in Article 12 of the Enforcement Regulations under the Food Sanitation Law.

172 Hypochlorous Acid Water

Listed as production methods of

Japanese Agricultural Standard for Organic Processed Foods (Notification No. 1606 of the Ministry of Agriculture, Forestry and Fisheries of October 27, 2005) (Established: Notification No.60 of January 20, 2000)

Japanese Agricultural Standard for Organic Livestock etc.

(Notification No. 1608 of the Ministry of Agriculture, Forestry and Fisheries of October 27, 2005) (Established: Notification No. 1608 of October 27, 2005)

Japanese Agricultural Standard for Organic Plants

(Notification No. 1605 of the Ministry of Agriculture, Forestry and Fisheries of October 27, 2005) (Established: Notification No. 59 of January 20, 2000)

4) Australia Therapeutic Goods Administration HOSPITAL GRADE Disinfectant ARTG: 335971 (7 May 2020)



Use Hydro-E, Prevent Spreading COVID-19. Help stop spread now.











FDA 🦱



Ads in Social media.











Actual Applications (w/bottle)











Deodorisation & Sterilisation

Actual Applications







Actual Applications (w/bottle)







Actual Applications (w/machine)



Food processing manufacture







Food processing manufacture

- Total preparation is used with Hydro-E, Washing Veggies and washing bench to ps and kitchen equipment's
- After washing and sanitising with Hydro-E just let it dry to finalise the job.



Noddle manufacture



Egg's washing before packaging



Fruits agricultural

It's economical, Sterilisation with non-toxic removes odours, no need to re-washi after because of residue free

Actual Applications











Glass & Plastic bottles sterilisation process

- Drinks and milk dairy farmer manufacturing can sterilise the bottles before injecting and prevent contamination. Save cost by shorten cleaning time.
- Tank sterilisation and any machinery cleaning.



Tape system







Equipment cleaning



Floor and area cleaning

Sanitising Gate at your premises.



Contactless misting with:

hydroe

SAFER DISINFECTION

- Kills 99.99% of COVID-19 (on contact)
- Non-hazardous
- Non-toxic
- Non-flammable
- Safe for use on food
- Allergy-Free
- Alcohol-Free
- Child & Pet safe
- Gentle on skin
- pH neutral
- ECO Friendly
- HOCL Based
- Made in Australia

Walk slowly through the arch

















For more information, Contact:

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Hydro-E Distribution

Emin

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