

CASE STUDY

# Improving Hygiene in Early Childhood Education Centres

A study assessing the impact of SIQURA  
Hospital Grade Disinfectant and Protectant  
compared with conventional cleaning protocols.



## INTRODUCTION

# Childcare: A Challenging Environment to Keep Clean

Filled with lots of little people and a wide range of surfaces, it is an ongoing challenge to create a genuinely hygienic environment within Early Childhood Education and Childcare Centres.


With some centres outsourcing cleaning and others relying on already stretched staff to fulfil the daily cleaning protocols, managing the infection control risks is often a challenging task.

One of the critical issues that we've identified is that conventional disinfectant products aren't doing enough — while they kill the germs of the surface, they do nothing to defend against what is to come. This means that as soon as a surface is touched after disinfection, the potential for contamination and infection returns.

All this to say, that a surface can have been recently cleaned and even 'look clean' but still be an infection risk.





A child is sitting on a grey and white striped rug under a white sheet. The child is wearing light blue shorts and white sneakers. They are holding a yellow stick. There are various toys scattered around, including a blue toy car, a red toy car, and a yellow toy. A basket of toys is visible on the right side of the rug. The background is a wooden floor.

**80% of infectious diseases occur because of contact spread through hands and surfaces.**

## WHAT IS SIQURA?

# An entirely new approach to cleaning & sanitation

SIQURA™ Hospital Grade Surface Disinfectant & Protectant destroys bacteria and locks onto surfaces to provide ongoing bacterial protection:

- 24hrs protection on high touch surfaces
- 30 days protection on low touch areas
- Kills 99.99% of Bacteria
- Effective against viruses\* including COVID-19

SIQURA™ Hospital Grade Disinfectant & Protectant has undergone extensive laboratory testing to national and international standards.

SIQURA™ is listed on the Australian Register of Therapeutic Goods (ARTG) as being effective against COVID 19 and a broad range of other germs.



SIQURA™ 75HG is a three-in-one solution. It **cleans, disinfects** and then remains bonded to create a self-sanitising surface that **protects** the surface against bacterial attack.

## THE TEST

# The Test: 10 centres over 30 days

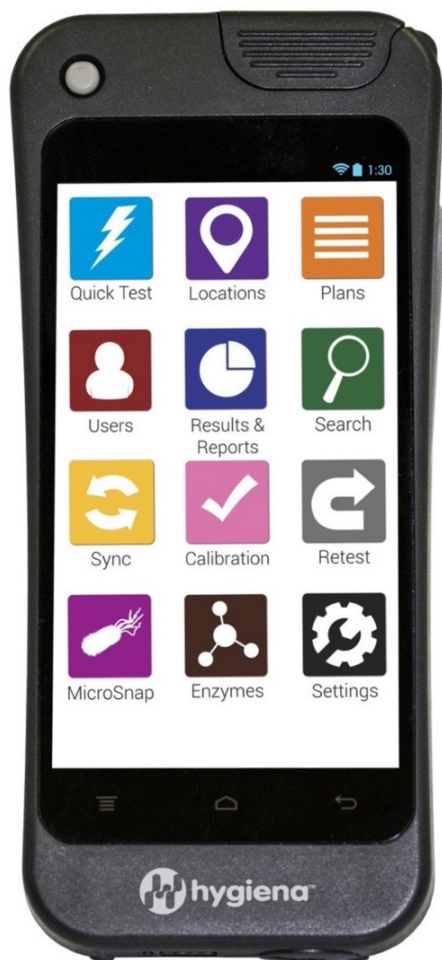
We selected 10 centres throughout Australia and identified 10 high traffic touch points in each centre to test.

To ensure accuracy of our results we used two different measurement methods — **ATP Testing** and **Bacterial Plate Testing**.

The test was conducted over 30 days.







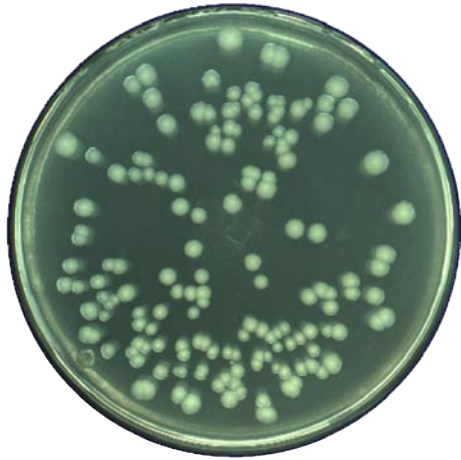
# ATP Testing

ATP testing is a rapid testing method used by Hygiene Auditors to quickly assess the cleanliness of surfaces. ATP monitoring is used in facilities to confirm that ATP (Adenosine Triphosphate) presence is eliminated or minimized by effective sanitation procedures. ATP monitoring is measured in Reflective Luminosity Units (RLU).

## ATP test results:

< 100 RLU are considered good results

< 20 RLU are considered excellent results



## Bacterial Plate Testing

Plate testing is a method used to measure the amount of bacteria on a surface. We used a swab to collect bacteria from a surface then transferred the bacteria to a growth plate. We let the bacteria grow on the plate and count how many there are. The result is measure in Colony Forming Units (CFU)

### Plate test results:

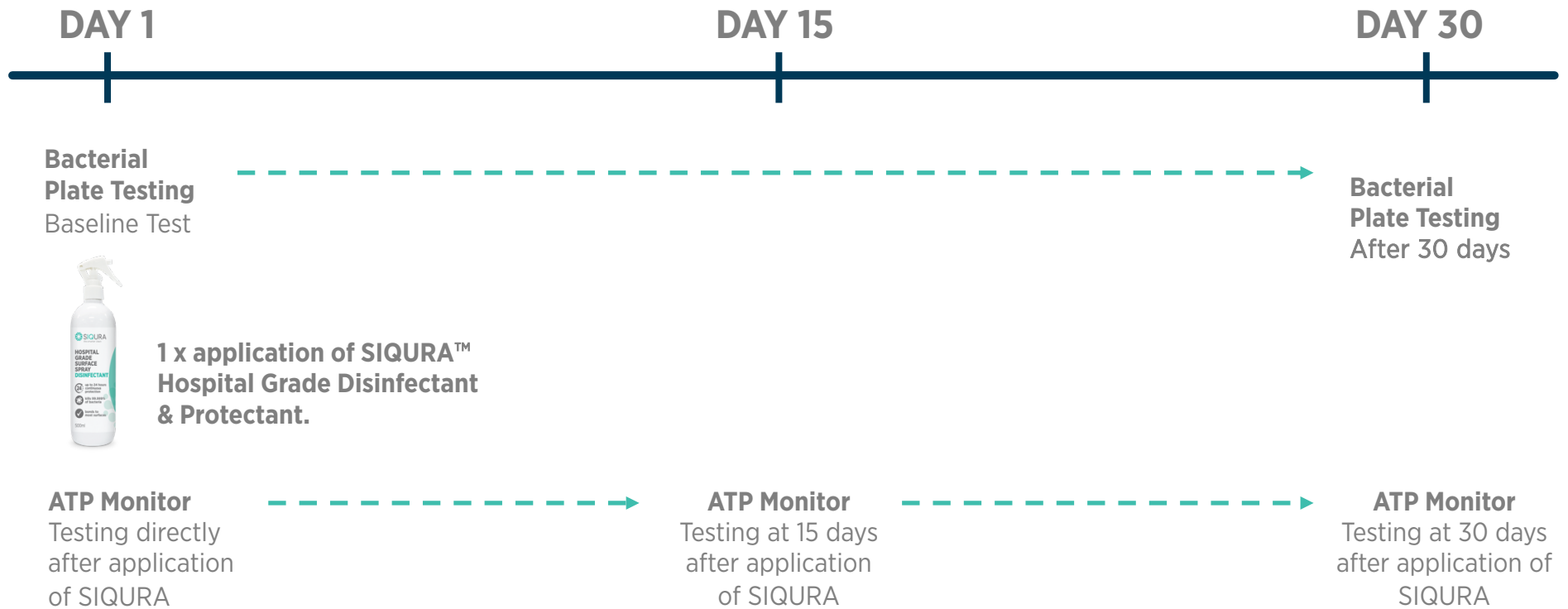
**< 20 CFU is considered a good result**

**< 10 CFU is considered an excellent result**

## THE TEST

# Timeline of the testing

Touchpoints had been cleaned using the regular cleaning protocols in each centre.





A young child with dark hair, wearing a grey t-shirt and blue jeans with a white lace waistband, is standing in a room and playing with a yellow toy. The room is filled with various toys on the floor, including a blue ball, a yellow toy, and a small green and purple toy. The background shows a wooden chair and a window with a brick wall. The text is overlaid in the center of the image.

**The results would probably come as a shock to many people...**

## WHAT WE FOUND

# Surfaces that had been cleaned with the standard cleaning protocols still returned alarmingly high ATP readings...

Our baseline ATP test showed us that ALL surfaces that had been cleaned with the standard protocols had very high ATP readings indicating that the surfaces are very dirty and in need of immediate cleaning.



**Door Handle**  
RLU=5323



**Cot Rail**  
RLU=5681



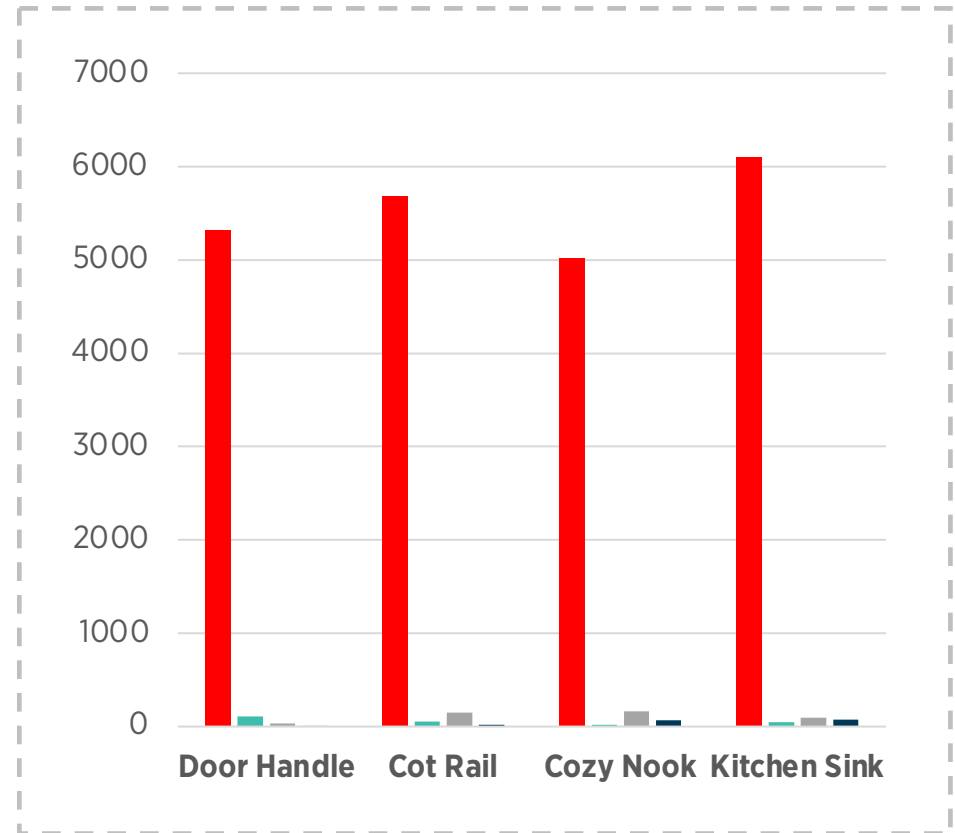
**Kitchen Sink**  
RLU=6104

< 100 RLU are considered good results  
< 20 RLU are considered excellent results

## THE RESULTS

**With just one application of SIQURA the ATP levels dropped to acceptable level — and remained there for 30 days.**

After cleaning once with SIQURA™ all surfaces tested returned levels of ATP that are considered acceptable. Even 15 and 30 days after application the ATP level where still showing acceptable ATP levels.



- Regular Cleaning
- Day 1
- Day 15
- Day 30





## THE RESULTS

# The bacterial plate testing returned similar results...

Several touch points returned levels of bacteria that would be considered as extreme — the kitchen sink and ball pit returned results of 24000 and 14000 CFU respectively.

After one application of SIQURA™ both of these touch point returned result of <10 CFU 30 days post application



### Kitchen Sink

Stage	CFU
Existing Protocols	24,000
30 days	<10

### Ball Pit

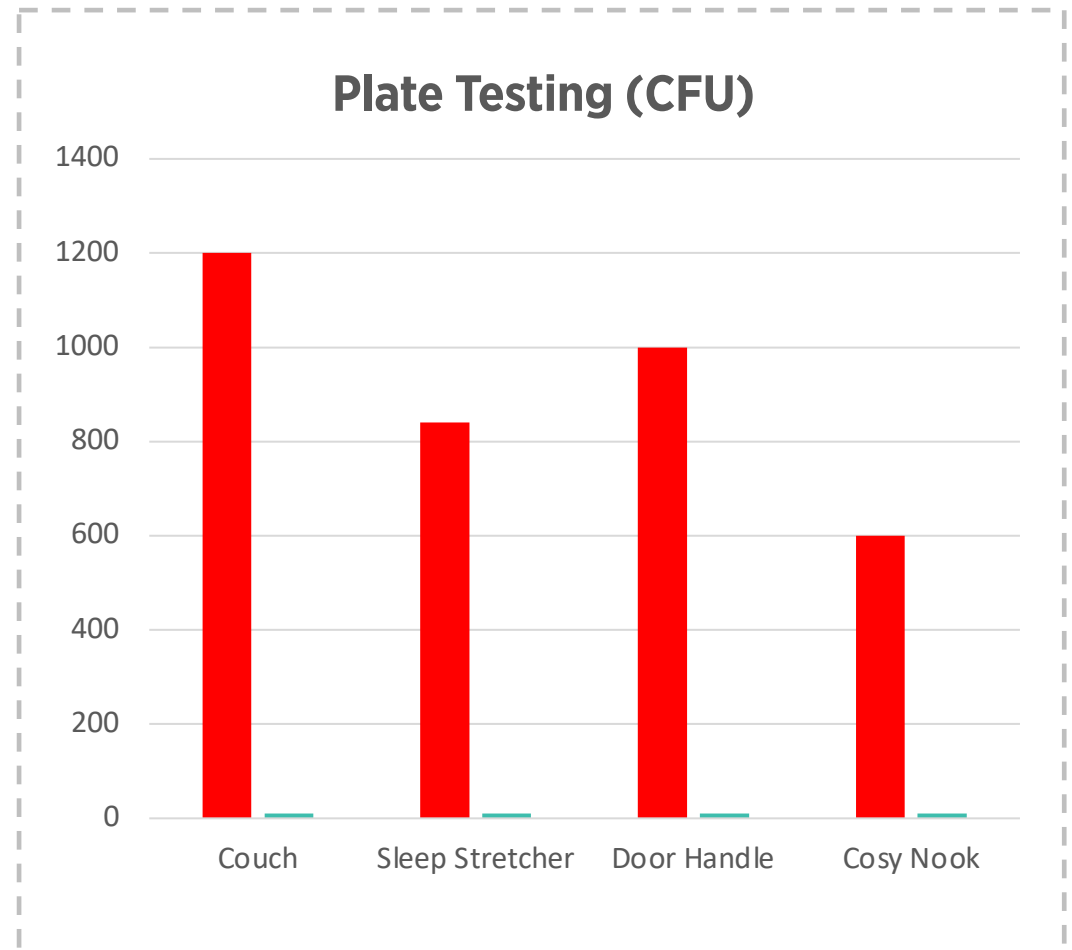
Stage	CFU
Existing Protocols	14,000
30 days	<10



## THE RESULTS

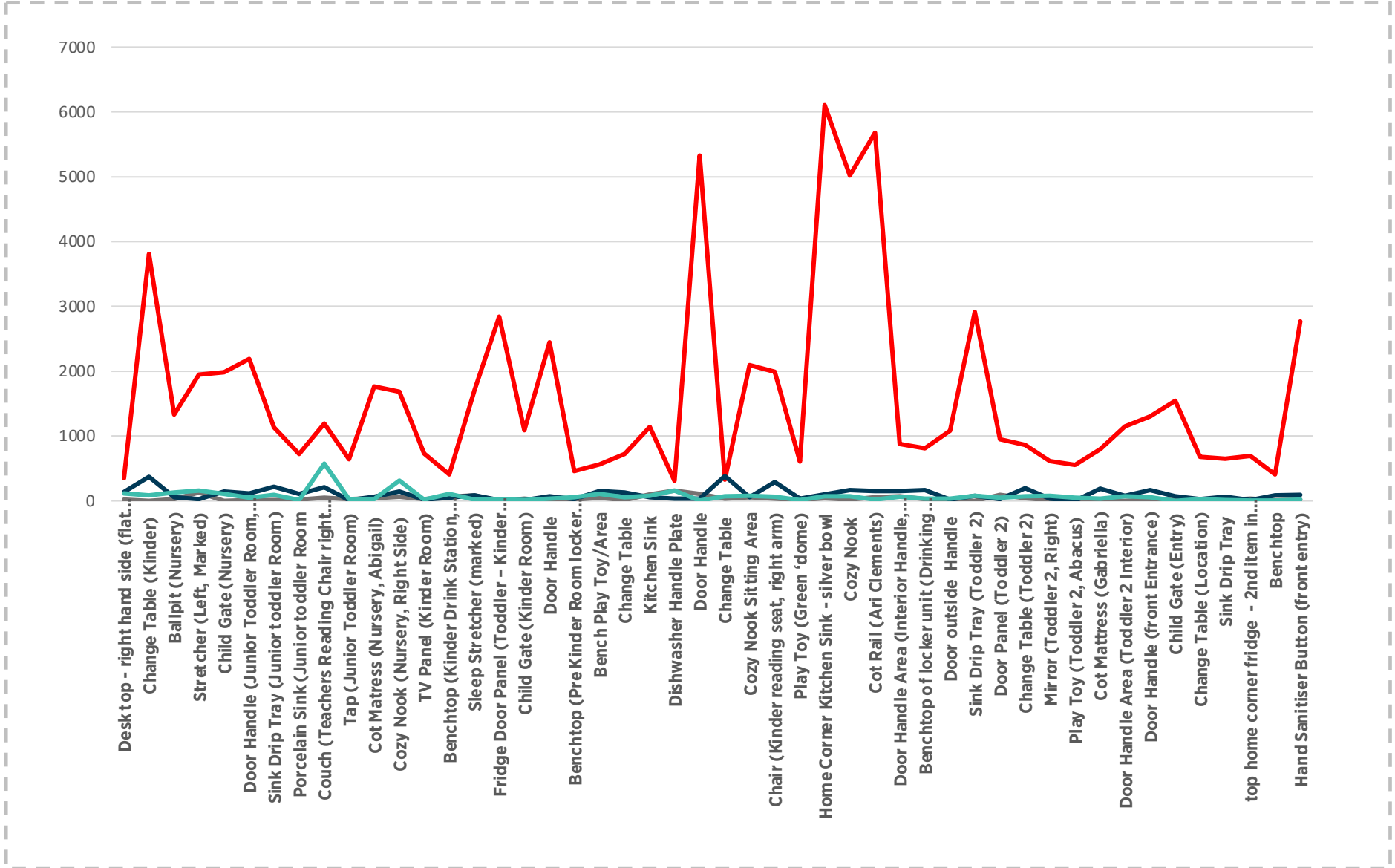
# Bacterial plate testing is considered highly accurate method

Even after 30 days the results from the areas treated with SIQURA were excellent.



■ Regular Cleaning  
■ Day 30

# Overall Results





A photograph of children in a classroom sitting at a table, focused on drawing. The background features a white wall with colorful illustrations of a blue octopus, a green snake, and a yellow bird. The scene is dimly lit, with the text overlaid in the center.

Overall insight  
Clean doesn't =  
hygienic

## THE RESULTS

# While surfaces had been visibly cleaned — they weren't hygienic...

It is common to think that a visibly clean surface is also a hygienic surface but as we can all see from this case study that is not the case. Traditional cleaning and disinfecting is good but it cannot provide for long term protection from germs.

To keep a surface germ-free we must continually disinfect the surface all day every day — OR use a durable protectant such as SIQURA™.

Along with numerous studies and independent laboratory tests, we believe that the risks associated with the spread of germs though out early childhood education centres can be dramatically reduced through using SIQURA™.



## THE SOLUTION



### **SIQURA™ is Cost Effective**

1 liter of SIQURA™ will cover up to 80 square meters. Regular cleaners will cover the same areas but considering they need to be applied multiple times a day to keep the germs at bay the cost saving in product, time and energy is huge.



### **SIQURA™ is Non-Corrosive**

Regular disinfectants based on Chlorine Bleach, Acids and Alcohol can be extremely corrosive and flammable. These product greatly reduce the usable life of equipment. SIQURA™ is non corrosive and non flammable



## THE SOLUTION



### **SIQURA™ is Effective**

SIQURA™ 75HG has been tested according to the following methods EN1276, EN13697, EN13624, ASTM 1053, EN 14476, AOAC 991.47, AOAC 991.48 , AOAC 991.49 and ASTM E2149 and is effective against a broad range of bacteria and viruses such as Human Coronavirus E229 (including COVID-19), Murine Hepatitis Virus (MHV), Staphylococcus aureus, Enterococcus hirer, Escherichia coli, Pseudomonas aeruginosa and Salmonella choleraesuis.



### **SIQURA™ is Non Harmful**

SIQURA™ is ideal to use around children and our environment. SIQURA™ is backed by Dermatest certification and does not require any special handling requirements, no messy dilution, no nasty chemical burns.

[www.siqura.com.au](http://www.siqura.com.au)

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