VIRAL-SHIELD

FORTIFIED WITH SILVER AND COPPER NANOPARTICLES

LEGIONELLA-X VIRAL-SHIELD MINIMIZES CORONAVIRUS RISKS IN EDUCATIONAL ESTABLISHMENT

Legionella-X Viral-Shield provides 99.9998% residual inactivation efficacy against Positive-gram bacteria, Negative-Gram Bacteria and Enveloped Viruses up to 60 days on all inanimate surfaces

Passed Japan Industrial Standard- JIS Z 2801:2010/A1 2012 Test Method for Antibacterial Activity and Efficacy

ASIA EXCELLENCE AWARD
TOP 20
PROMISING SME 500 2016
TOP 100 SINGAPORE EXCELLENCE AWARD
WPO WORLDSTAR WINNER 2017
AsiaStar 2016 APF
Singapore Packaging STAR AWARD 2016
A member of
A member of EFC EUROPEAN FEDERATION OF CORROSION
A member of NACE INTERNATIONAL
A member of THE WORLD CORROSION ORGANIZATION
A member of STLE Society of Tribologists and Lubrication Engineers

Introduction

Grappling with the Coronavirus has been a constant learning process for epidemiologists, doctors, patients, governments and individuals. Some things we thought we knew have changed as more data arrives and more countries study its effects.

The coronavirus that causes COVID-19 mainly spreads from person to person. When someone who is infected coughs or sneezes, they send droplets containing the virus into the air. A healthy person can then breathe in those droplets. We may also catch the virus if we touch a surface or object that has the virus on it and then touch our mouth, nose, or eyes.

The coronavirus can live for hours to days on surfaces like countertops and doorknobs. How long it survives depends on the material the surface is made from.

The family of viruses that includes the one that causes COVID-19 can live on some of the surfaces we probably touch every day.

Students returning to classes in the wake of Covid-19

As global lockdowns start to ease, colleges, schools, playschools, and kindergartens will resume their normal activities.

We simply cannot keep our children at home for too long. The impact on their socio-emotional and mental well-being will be serious, hence, attending school will not be optional, and students will have to return to school according to their assigned schedules.

However, many parents globally have raised concerns about sending their children to school in the light of the Covid-19 pandemic.

We know that said institutions will do its utmost best to keep schools safe through means such as health screenings for everyone entering the school, good hygiene practices and safe distancing.

As some children may find it difficult to wear a mask all day, all pre-school and primary school pupils will be given face shields when they return to school in Singapore

In additional to above safety measures, Magna has developed Viral-Shield, a self-disinfecting coating to be applied on all inanimate surfaces and face shield providing up to 60 days of residual inactivation efficacy against enveloped viruses and bacteria.

Description

Legionella-X Viral-Shield fortified with Silver and Copper Nanoparticles is a potent water-based disinfectant coating specially developed to provide lingering disinfecting effect on all inanimate surfaces.

It provides up to 60 days of disinfecting efficacy on all coated surfaces and is most ideal to be used on face shield, plastic shield, etc.

It has a killing efficacy of up to 99.9998% to 99.99994% against positive-gram, negative-gram bacteria and enveloped viruses.

It is non-flammable making it safe to be used in enclosed areas even near hot-working areas.

Benefits

- Passed JIS Z 2801:2010 /A 1:2012 Test.
- Disinfecting Efficacy up to 99.99994%
- Effectively kills positive-gram, negative-gram bacteria, and enveloped viruses
- Provides up to 60 days of disinfecting efficacy for all inanimate surfaces after coated with Viral Shield.
- Non-Flammable
- Water-based facilitates indoor usage.
- Pleasant lingering fragrance.

TEST REPORT: 7191237543-CHM20-RC

Date: 21 MAY 2020 Tel: +65 68851345 Fax: +65 67732912

Client's Ref: Email: Randy.CHIN@tuv-sud-psb.sg

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PSB Singapore

Add value.
Inspire trust.

SUBJECT

Antibacterial Activity Evaluation

CLIENT

Magna International Pte Ltd
10H Enterprise Road
Singapore 629834

Attn : Nelson Cheng

SAMPLE SUBMISSION DATE / TEST DATE

04 May 2020 / 05 May 2020

DESCRIPTION OF SAMPLE

One sample of panel labelled "Coated with Legionella-X Viral Shield for 60 day on PET plastic sheet (Batch No. 20/01/03)" and one sample of panel labelled "Not treated" were submitted by the above company.

METHOD OF TEST

JIS Z 2801:2010/A1:2012
"Antibacterial products – Test for antibacterial activity and efficacy".

The test microorganisms used were :

Staphylococcus aureus (ATCC 6538P)
Escherichia coli (ATCC 8739)

Size of Treated Sample: 5 cm x 5 cm
Size of Untreated Sample: 5 cm x 5 cm
Size of film: 4 cm x 4 cm polyethylene film
Volume of test inoculum : 0.2 ml

TÜV SÜD PSB

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Singapore 118221

TEST REPORT: 7191237543-CHM20-RC
21 MAY 2020

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RESULTS

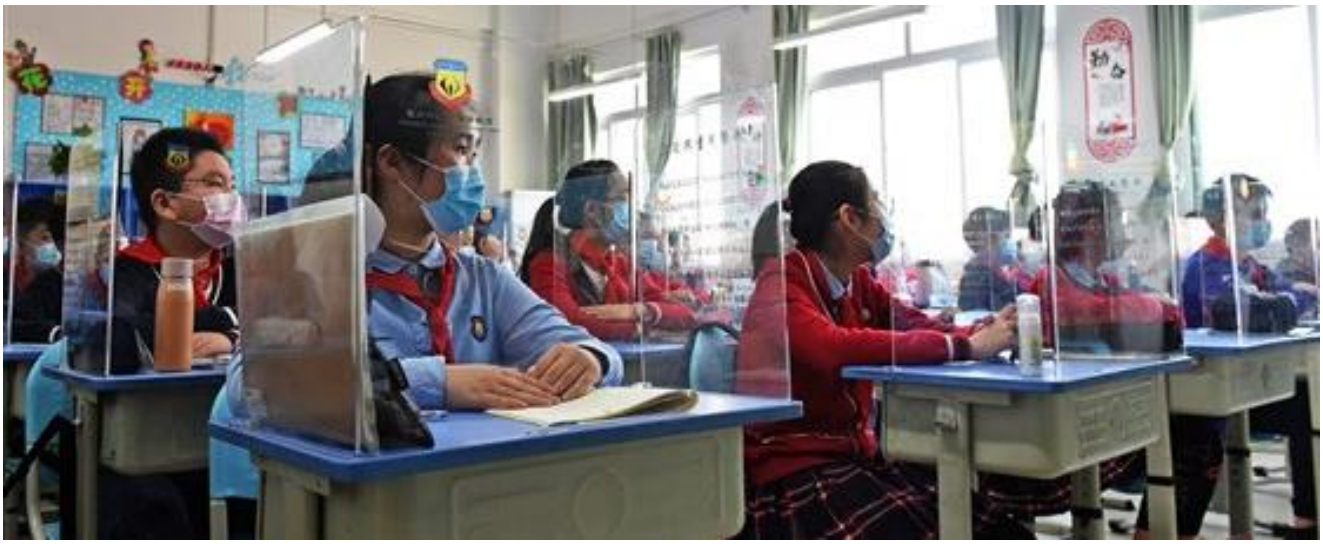
Test microorganism (Bacterial cells inoculated per test piece)	Average of the number of viable cells of test microorganism per test piece		Value of Antibacterial Activity (Criteria : Not less than 2.0)
***Staphylococcus aureus* (ATCC 6538P)**	0 hour	24 hours	
Control: Not treated	120 000	6 100 000	-
Sample: Coated with Legionella-X Viral Shield for 60 day on PET plastic sheet (Batch No. 20/01/03)	-	Less than 10	More than 5.78

Test microorganism (Bacterial cells inoculated per test piece)	Average of the number of viable cells of test microorganism per test piece		Value of Antibacterial Activity (Criteria : Not less than 2.0)
***Escherichia coli* (ATCC 8739)**	0 hour	24 hours	
Control: Not treated	130 000	15 000 000	-
Sample: Coated with Legionella-X Viral Shield for 60 day on PET plastic sheet (Batch No. 20/01/03)	-	Less than 10	More than 6.18

TÜV SÜD PSB TEST REPORT
JIS Z 2801:2010/A1 2012 Test Method for Antibacterial Activity and Efficacy

LEGIONELLA-X

YOUR PARTNER IN ERADICATION OF PATHOGENS



Typical Properties

Appearance
Translucent liquid

Viscosity
Free Flowing

Flash Point
Non-Flammable

Specific Gravity
1

Odour
Mint

Directions for Use

Apply via fogging and spraying on any inanimate surfaces, gently wipe dry.

Or apply by spraying on a piece of cloth and wipe it on any desired surfaces.

Available Packaging

110ml spray bottle

500ml spray bottle

5, 25 and 200 litres drum.

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