

SHIELD *me*

NATURAL DISINFECTANT, STERILISER, SANITISER, SUITABLE
FOR HUMAN BEINGS, OTHER LIFE FORMS AND ALL SURFACES

Technical Data

01.02.2020

Description

SHIELD_{me} is an electrochemically activated aqueous solution, it is a result of correlation of electrical voltages, chemical reactions and mutual conversion of chemical and electrical energy, first invented in Russia.

How it works?

SHIELD_{me} basically creates a hostile environment where microbes and viruses cannot thrive, so it mimics precisely the human immune system. **SHIELD_{me}** is based on Hypochlorous Acid (HOCl), which is one of the most potent and natural disinfectants around, with rapid and prolonged action.

Characteristics

General data:	Perfume free, liquid, colourless
Active Ingredient:	Hypochlorous Acid
Colour:	Colourless, clear
Odour:	Barely perceptible odour
Oxidising:	Non-oxidizing
Solubility in water:	Soluble
Flash point:	Non-flammable
pH:	7.2 +/-0.5

Components

Component(s):	CAS#	%wt
Water	7732-18-5	>=%99
Hypochlorous Acid	7790-92-3	<=%0.02

Instructions for use

Remove heavy deposits of soil from the surface. Use appropriate dilution according to the Dilution Table (see the Table 1). Apply **SHIELD_{me}** directly in a liquid form with sprayer or use cloth, mop or sponge to use the solution on the surface. For hard-to-reach areas and/or large areas use high-pressure sprayer or cold fogger. Exposition time depends on the level of contamination.

Safety Data Sheet

See Material Safety Data Sheet (MSDS)

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For more information contact: info@shieldmeglobal.com

Features & Benefits

- %100 harmless, natural & eco-friendly
- pH neutral
- gentle and non-irritating
- odourless and colourless, non-staining
- highly effective (%99.99) against bacteria, viruses, spores, biofilm and fungi
- kills %99.9999 of MRSA, vancomycin, staph, listeria, salmonella, e-coli and more...
- grey water and septic safe
- multi-purpose use
- based on natural ingredients
- user friendly: no protective gear required, no health and safety risk, no rinsing after use
- cost-effective and 100 times more effective than commonly used solutions for killing bacteria, viruses and viral spores (including anthrax)
- prolonged action (time depends on environment)
- simplifies supply chain (one solution for various usages)

Storage Conditions:

Store in a dry cool place, avoid high temperatures and direct sunlight. Avoid accidental or uncontrolled contact of product with acids and hydrogen peroxide. Use within 3 months after opening.

Health Warnings:

Under normal usage conditions, the probability of any adverse health effect is extremely LOW! However, in case of skin irritation occurring, wash the affected area with water. In case of eye contact, (if irritation occurs) flush eyes with water. In case of ingestion, drink 8oz glass of water. If breathing problems develop, move away from the product and go into fresh air.

Package Options



Antimicrobial Efficacy

EN 1276

Chemical disinfectants and antiseptics — Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic, and institutional areas — Test method and requirements (phase 2, step 1).

Organism:	Killing Time:
Enterococcus hirae	30 sec
Escherichia coli	5 sec
Klebsiella pneumoniae NDM-1	5 sec
Staphylococcus aureus	5 sec
Pseudomonas aeruginosa	5 sec
Acinetobacter Baumannii	15 sec
Campylobacter jejuni	15 sec
Salmonella typhimurium	15 min
Listeria monocytogenes	10 min
MRSA	10 sec

EN 13623

Chemical disinfectants and antiseptics. Quantitative suspension test for the evaluation of bactericidal activity against Legionella of chemical disinfectants for aqueous systems. Test method and requirements (phase 2, step 1).

Organism:	Killing Time:
Legionella pneumophila	30 sec
Legionella pneumophila	30 sec

EN 13697

Chemical disinfectants and antiseptics — Quantitative non-porous surface test for the evaluation of bactericidal and/or fungicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas — Test method and requirements without mechanical action (phase 2/step 2).

Organism:	Killing Time:
Enterococcus hirae	30 sec
Listeria monocytogenes	10 min
EMRSA	5 sec
MRSA	5 sec
Pseudomonas aeruginosa	5 sec
Salmonella typhimurium	15 min
Staphylococcus aureus	5 sec
Escherichia coli	5 sec

EN 14349

Chemical disinfectants and antiseptics. Quantitative surface test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in the veterinary area on non-porous surfaces without mechanical action. Test method and requirements (phase 2, step 2).

Organism:	Killing Time:
Proteus vulgaris	30 sec
Pseudomonas aeruginosa	5 sec
Staphylococcus aureus	5 sec
Enterococcus hirae	30 sec

EN 13727

Suspension-based study formally used to evaluate bactericidal activity of products that are used in the medical area (e.g. hygienic handrub, hygienic handwash, surgical handrub, surgical handwash, instrument disinfection etc.).

Organism:	Killing Time:
Enterococcus hirae	30 sec
Listeria monocytogenes	10 min
MRSA	10 sec
Pseudomonas aeruginosa	5 sec
Salmonella typhimurium	30 sec
Staphylococcus aureus	5 sec



Yeast, Mould & Fungi Efficacy

EN 1650

Chemical disinfectants and antiseptics — Quantitative suspension test for the evaluation of fungicidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic, and institutional areas — Test method and requirements (phase 2, step 1).

Organism:	Killing Time:
Aspergillus fumigatus	5 sec
Aspergillus Niger	5 sec

EN 13697

Chemical disinfectants and antiseptics — Quantitative non-porous surface test for the evaluation of bactericidal and/or fungicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas — Test method and requirements without mechanical action (phase 2/step 2).

Organism:	Killing Time:
Candida Albicans	30 sec
Aspergillus Niger	5 sec



Virucidal Efficacy

EN 14476 – Quantitative suspension test for virucidal activity (in vitro)

Suspension based study used as a presumptive test to evaluate virucidal activity.

Organism:	Killing Time:
Norovirus	5 min
Feline Calicivirus (FCV)	2 min

EN 14675

Chemical disinfectants and antiseptics. Quantitative suspension test for the evaluation of virucidal activity of chemical disinfectants and antiseptics used in the veterinary area. Test method and requirements (Phase 2, step 1)

Organism:	Killing Time:
Koi Herpes Virus	10-15 min

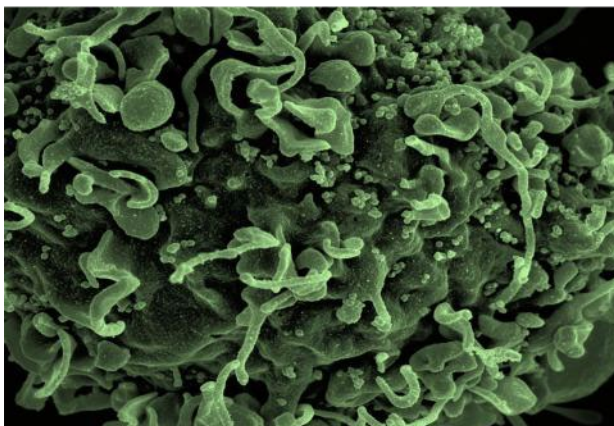
ASTM E 1052

The ASTM E1052 method is performed to determine the virucidal efficacy of a biocide against a test virus in suspension. The method may be used to establish the initial efficacy of several disinfectant active concentrations at various selected contact times. It is also used to determine the anti-viral effectiveness of liquid hand soaps, over-the-counter (OTC) topicals, and other antiseptics designed for use on the skin. The test is conducted according to the standards and methods accepted by the US Environmental Protection Agency (EPA) and Food and Drug Administration (FDA) for registration of the product as a virucidal agent.

Organism:	Killing Time:
Bovine viral diarrhea virus	10-15 min
Feline Calicivirus (FCV)	1 min
Hepatitis C	10-15 min
Influenza A virus (H1N1)	10-15 min
SARS virus	10-15 min
HIV 1	10-15 min

AHVLA

Organism:	Killing Time:
Avian Influenza Virus (AIV) / Bird Flu	10 min
NDV	10 min



Sporicidal Efficacy

EN 14347

Chemical disinfectants and antiseptics – Basic sporicidal activity – Test method and requirements (phase 1).

Organism:	Killing Time:
Bacillus cereus	5 min
Bacillus subtilis	5 min



EN 13697

Chemical disinfectants and antiseptics – Quantitative non-porous surface test for the evaluation of bactericidal and/or fungicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas – Test method and requirements without mechanical action (phase 2, step 2).

Organism:	Killing Time:
Clostridium Difficile	1 min
Bacillus subtilis	5 min

EN 13704

Chemical disinfectants. Quantitative suspension test for the evaluation of sporicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas. Test method and requirements (phase 2, step 1).

Organism:	Killing Time:
Clostridium Difficile	1 min
Clostridium perfringes	1 min

Mycobacterium Efficacy

EN 14204

Chemical disinfectants and antiseptics. Quantitative suspension test for the evaluation of mycobactericidal activity of chemical disinfectants and antiseptics used in the veterinary area. Test method and requirements (phase 2, step 1).

Organism:	Killing Time:
Mycobacterium fortuitum	10 min



EN 14348

Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of mycobactericidal activity of chemical disinfectants in the medical area including instrument disinfectants – Test method and requirements (phase 2, step 1).

Organism:	Killing Time:
Mycobacterium terrae	10 min

EN 14563

Chemical disinfectants and antiseptics - Quantitative carrier test for the evaluation of mycobactericidal or tuberculocidal activity of chemical disinfectants for instruments used in the medical area – Test method and requirements (phase 2, step 2).

Organism:	Killing Time:
Mycobacterium avium	10 min
Mycobacterium terrae	10 min
Mycobacterium fortuitum	10 min

Materials Compatibility

Material	Compatibility
304 Stainless Steel	Good
316 Stainless Steel	Excellent
ABS Plastic	Good
Carbon Steel	Fair
ChemRaz (FFKM)	Good
CPVC	Excellent
EPDM	Excellent
Fluorocarbon (FKM)	Excellent
Teflon	Excellent
Silicone	Excellent

Material	Compatibility
Hyalon	Excellent
Hytre	Fair
Kalrez	Excellent
LDPE	Fair
Natural Rubber	Severe Effect
Neoprene	Fair
Nylon	Severe Effect
Polycarbonate	Excellent
Polypropylene	Good
Polyurethane	Excellent