SCUDO

ANTIBACTERIAL ELASTOMERS AND GASKET

ANTIBACTERIAL SEALS AND SHOWERHEADS

FOR THE WATER SECTOR

FORGET ABOUT BACTERIA, FROM NOW ON.

SCUDO FOR THE WATER SECTOR

WHAT IS SCUDO

SCUDO is a range of antibacterial elastomers that can be used to produce seals, filters, showerheads – and much more.

HOW DOES SCUDO WORK

Over time, bacterial colonies grow on the surface of rubber and silicone membranes. These are responsible for the spread of dangerous infections, such as the Legionella and some cyanobacteria which are highly toxic for the human being.

Thanks to its patented formula, SCUDO gives membranes the internal power to eradicate 99.9% of the bacteria, thus reducing the risk of infection.

With SCUDO, we aim at providing producers and consumers with a new tool which can improve the quality of products related to the water sector, as well as help them protect themselves from dangerous diseases.

THE ADVANTAGES OF SCUDO

Fewer infections, more protection, better production.

- The antimicrobial action destroys Legionella and cyanobacteria
- 99.9% killing of bacteria
- Scientifically proven
- Patented technology
- Healthier water
- Lower expenses
- Better products

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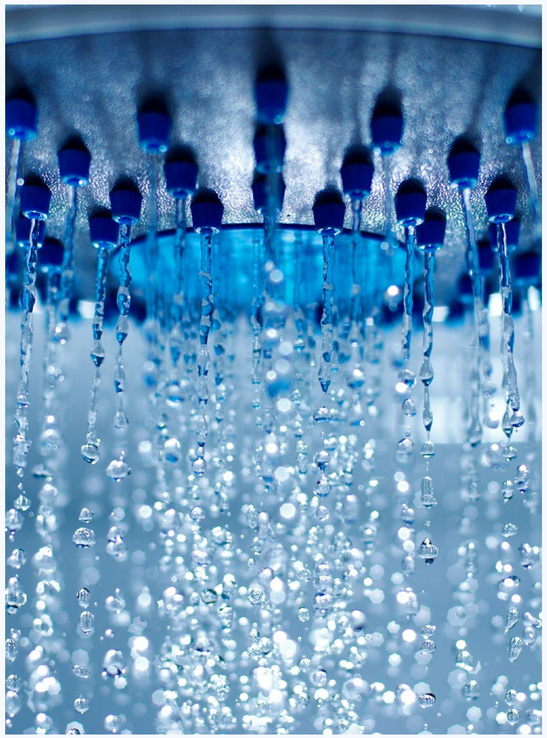
PROVEN EFFECTIVENESS

The effectiveness of SCUDO technology has been proven by accurate scientific tests carried out by the University of Milan – Department of Biomedical, Surgical and Dental Sciences, Section One Health – and the University of Bologna – Department of Biological, Geological and Environmental Sciences.



The test on the weakening of the microbial load was performed by using a 24 drain wells plate for cell cultures (Ø16 mm, volume 1mL).

In order to allow a better manipulation of the elastomer sheets, a rectangular section of 5cm x 8cm was taken as a sample and from this it was cut out a disc, which had suitable dimensions for its insertion into the above mentioned plate.

Using a sterile gripper, each disc was placed on the bottom of a drain well and then covered with 1 mL of each bacterial suspension.

For the SCUDO tests it has been used the following bacterial species:

- Legionella ATCC 33152 at two different concentrations: 10^3 UFC/mL and 10^4 UFC/mL
- Desmodesmus communis
- Limnothrix sp.
- Phormidium sp.

The exposure times (time-point) used to get an indication of the possible dynamics of the weakening of the microbial load were:

– T0: contact with elastomers

– T1: 5 minutes post-touch (PT)

– T2: 30 minutes PT

– T3: 1 hour PT

– T5: 6 hours PT

– T6: 24 hours PT.

At each time-point, a portion of the bacterial suspension (50µL) was appropriately diluted in sterile physiological saline (NaCl 0.9%) and then seeded (50µL) in a solid bottom plate.

After incubation at 37°C for 24 hours, colonies were counted to obtain data regarding the starting microbial load at each time-point.

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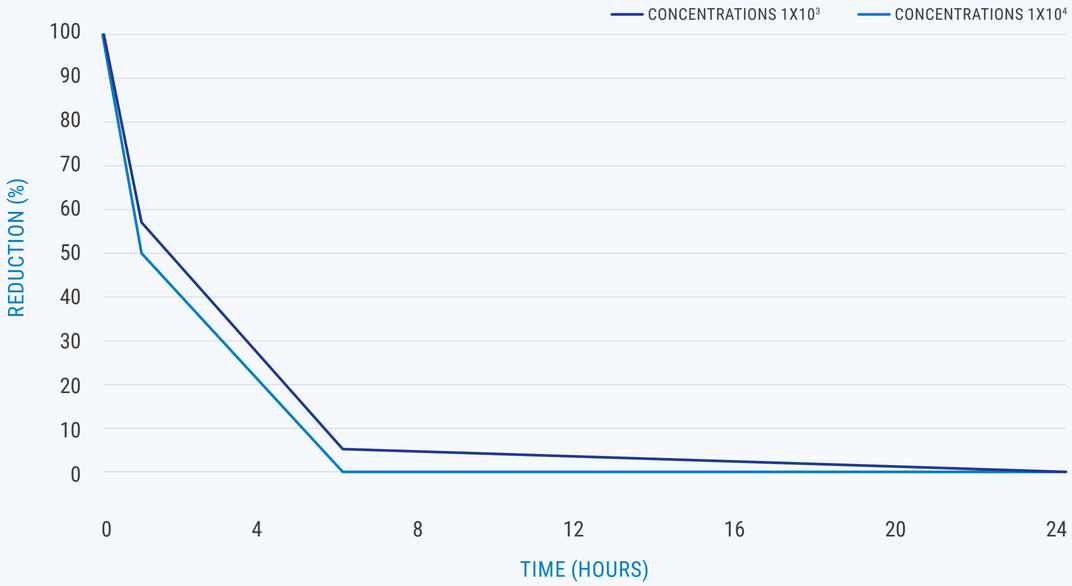
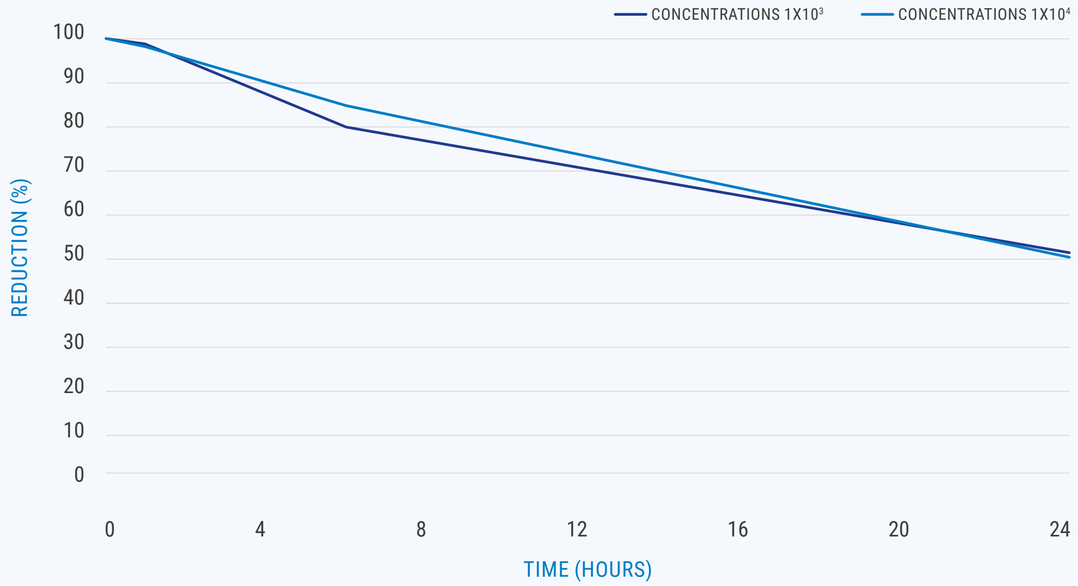
SCUDO COMPOUND AGAINST LEGIONELLA



TIME (HOURS)	CONCENTRATIONS $1X10^3$	CONCENTRATIONS $1X10^4$
0	100%	100%
1	58%	50%
6	5%	0%
24	0%	0%

TRADITIONAL COMPOUND AGAINST LEGIONELLA



TIME (HOURS)	CONCENTRATIONS $1X10^3$	CONCENTRATIONS $1X10^4$
0	100%	100%
1	98%	97%
6	80%	85%
24	53%	51%

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DISCOVER IN THE VIDEO THE RESULTS OF THE TESTS ON THE SCUDO COMPOUNDS

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CONTACT US

FOR MORE INFORMATION ON SCUDO PRODUCTS FOR THE WATER SECTOR

info@scudo.technology

SCUDO

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SCUDO is an innovative start-up

Scudo Technology
Via Provinciale 4/G
24060 Adrara San Martino (BG) – Italy

https://scudo.technology/it/
info@scudo.technology