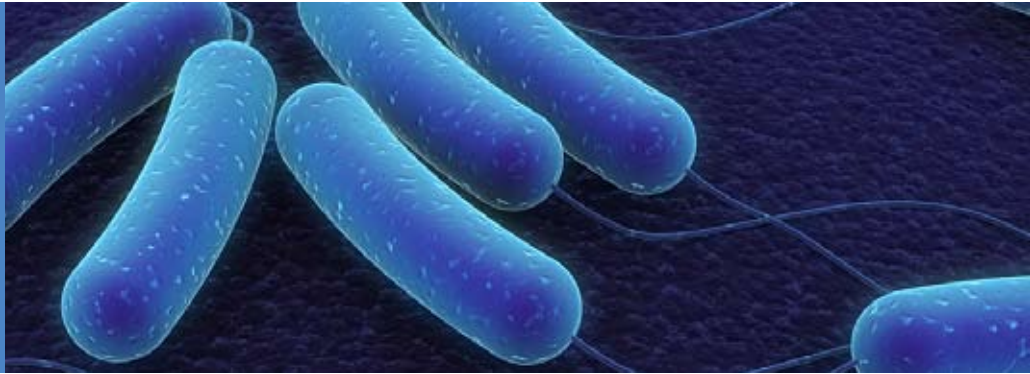


Addagrip Bio gives epoxy flooring coatings, decorative finishes and self-smoothing screeds protection against the growth of bacteria, fungi and mould.



### Why antimicrobial protection?

Bacteria, mould and fungi are found in every environment and are a natural part of everyday life. Even in the cleanest of surroundings, microbes will begin to multiply on surfaces, sometimes to harmful levels. When these surfaces are touched by human contact, the transfer of microbes begins, resulting in cross-contamination. Some of the deadliest bacteria, such as MRSA, E.coli and Listeria can be caught via cross-contamination, leading to infection and illness.

Using Addagrip Bio in our flooring materials gives built-in antimicrobial protection which works continuously 24/7 to reduce levels of bacteria, helping to prevent the risk of degradation, discoloration and odours.

### Why use Addagrip Bio?

Addagrip Bio silver ion antimicrobial technology, when added to our coatings and screed floor finishes provides continuous built-in protection that will not leach from the surface or be wiped off or washed away, providing a lifetime protection for the floor or wall.

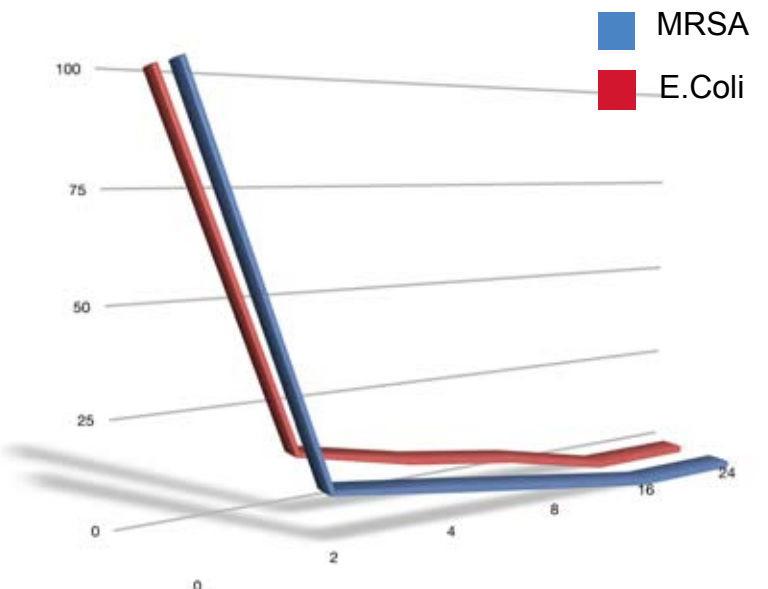
Addagrip Bio is regulated in the UK and EU by the Biocidal Products Directive (BPD) and in the U.S by the EPA.

### Addagrip Bio Efficacy

Addagrip Bio has been proven to reduce the overall level of bacteria on substrates by up to 99%.

It has been used in many applications, providing antimicrobial protection for the active life of the product.

The graph (right) demonstrates the reduction of up to 99.99% in bacterial load a 2 hour period against MRSA and E.Coli when using Addagrip Bio.



**Effective against?**

- MRSA
- E.coli
- Legionella
- Pseudomonas
- Salmonella
- Listeria
- Campylobacter
- Staph.aureus
- Aspergillus niger

**Suitable for which environments?**

- Hospitals
- Laboratories
- Kitchens
- Schools
- Gyms
- Bathrooms

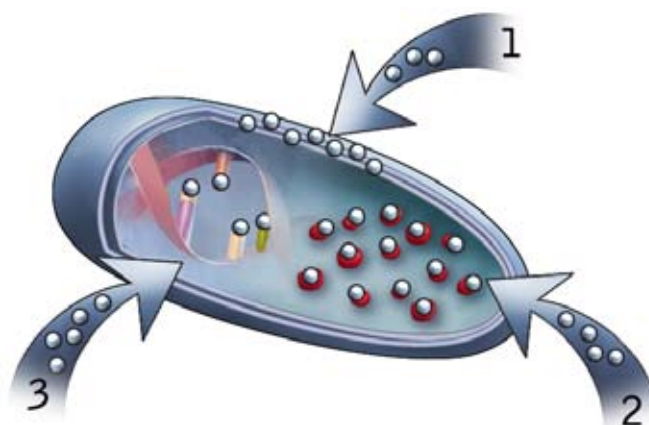
**What is Silver ion antimicrobial technology?**

Silver is widely accepted as having broad-spectrum antimicrobial activity. In order to understand why this is so, it is necessary to examine the action of silver ions against microbes. The following diagram and comments will help to explain just how silver is so effective in the fight against microbes.

(1) Silver ions may bind to the cell surface, this disrupts the cell wall and prevents cells growth.

(2) The silver ions are attracted to the thiol groups in the cell enzymes. They attach themselves to these groups which stop the bacterium producing energy.

(3) Silver ions interrupt the cell DNA preventing DNA replication.



**Is it safe?**

Yes - silver technology has a low toxicity and is used in a wide range of applications such as implantable devices and skin creams.

**How long will it last?**

Addagrip Bio incorporated into a flooring product will last for the normal life of the product under correct use.

**Does it replace cleaning?**

The Addagrip Bio additive is complementary to cleaning products. Our technology continues to work 24 hours a day, in between the normal cleaning schedules, thus reducing growth of the microbes preventing them from reaching potentially dangerous levels.

**Is the look of the flooring affected by Addagrip Bio?**

The Addagrip Bio additive is specifically designed for each flooring type and the addition rates are kept to a minimum so there will be no change to the characteristics of the product other than achieving antimicrobial efficacy.

**Can bacteria become resistant to silver ion technology?**

Due to the several modes of action silver utilises, it is highly unlikely bacteria will become resistant to Addagrip Bio technology.

**Does it leach?**

No, silver ions do not leach but remain active on the surface of the flooring product.