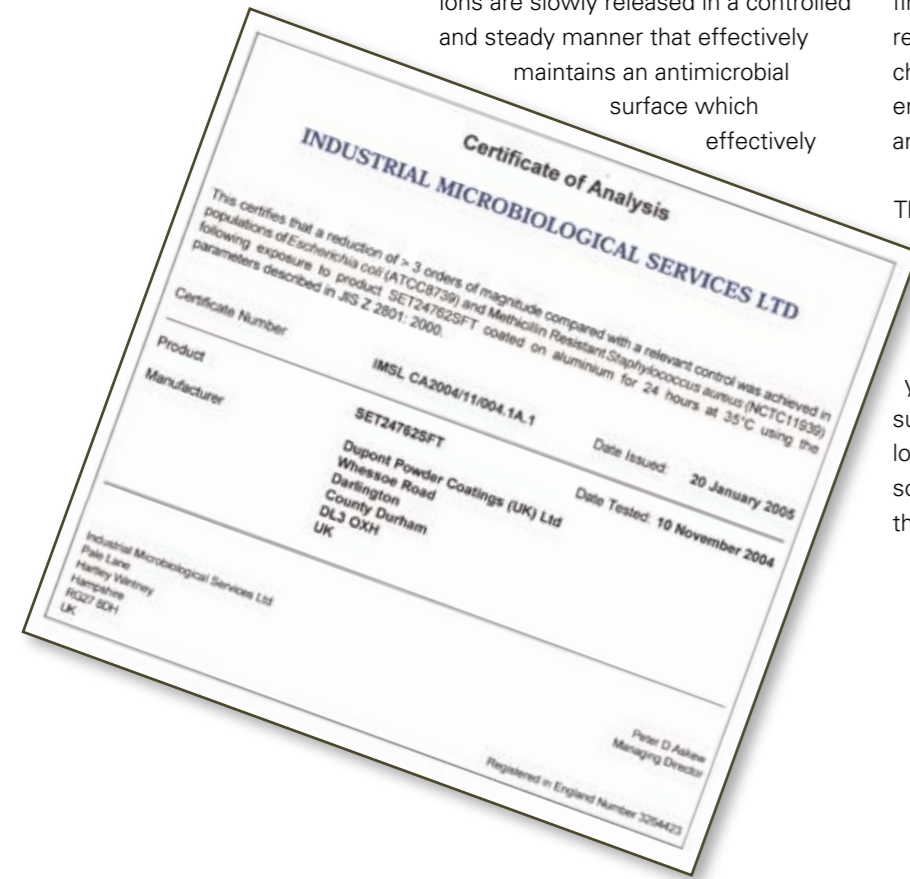


## DuPont Alesta® AM Powder Coatings .....protecting your health

DuPont Alesta® AM Powder Coatings contain elemental silver, ionically bonded into a bio-compatible ceramic material known as a Zeolite. In the presence of moisture, silver ions are slowly released in a controlled and steady manner that effectively maintains an antimicrobial surface which effectively

prevents the growth of bacteria, mould and fungi on the product. In all other ways, DuPont Alesta® AM powders offer all the well-known advantages of powder coatings as an industrial finishing system; eg. toughness, resistance to mechanical damage, chemical resistance, environmentally friendly with zero VOC and ease of application.

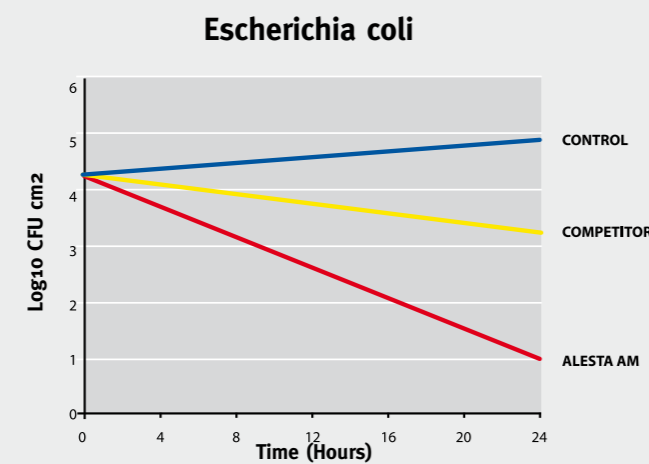
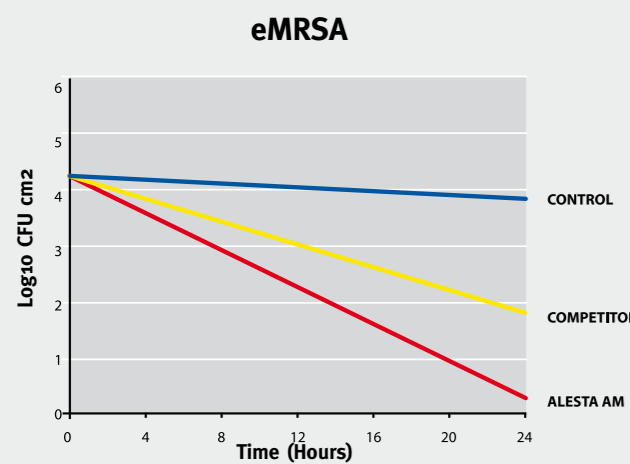
They are available in all colours, gloss levels and special finishes, such as textures, hammers etc. DuPont Alesta® AM Powder Coatings have already been used for a number of years in the US for coating products such as door handles, ductwork, lockers and shelving in hospitals and schools and they are now available in the UK.



Learn more about how DuPont can be your Powder Coatings partner.

To learn how DuPont Alesta® AM Powder Coatings can help you suppress bacteria in your clean environment, call us.  
Telephone our Sales Office Direct on 01325 347000  
OR Fax us Direct on 01325 288997

DuPont™ Alesta® AM  
Powder Coatings  
**Antimicrobial coatings that control  
bacteria growth**



A 99.9% reduction in micro-organism population results from using Alesta® AM powder coatings.



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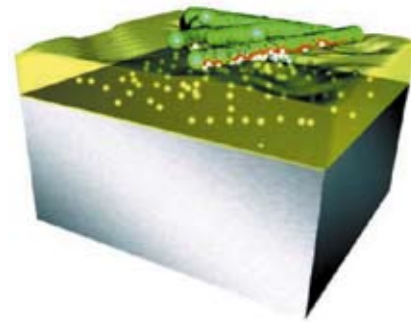


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# DuPont Alesta® AM Powder Coatings



Silver ions in a 100% inorganic aluminosilicate carrier are released through a unique ion exchange process. Moisture in the air causes a controlled release at a slow, steady rate to provide excellent protection for decades.

Over recent years there has been increasing public concern over the rise in bacterial infections, particularly with the increasing prevalence of antibiotic resistant strains. DuPont Alesta® AM Powder Coatings help to prevent the growth of bacteria, mould and fungi on the surface of a product. Products coated in Alesta AM Powder Coatings effectively inhibit the growth of bacteria such as Staphylococcus Aureus, (MRSA strain) and E-coli; independent tests have shown a population reduction of >99.9% in these micro-organisms after contact with Alesta® AM coated surfaces.

Silver has been used as an antimicrobial for thousands of years; in ancient China and Egypt silver was used both for water storage and food utensils. The Vatican decreed in the 11th century that communion chalices should be made of silver to prevent transmission of germs. More recently silver has been used widely in burns treatment preparations and dressings; for catheters and heart valve suture rings; NASA even uses silver to maintain water purity on the space shuttle. Most importantly, because of the mechanism by which it kills bacteria through penetration of the cell walls, there is no known occurrence of bacterial resistance being developed for the use of silver.

So it was natural that manufacturers of plastics and coatings should look to incorporate silver into their products to provide antimicrobial properties; but it was the development of compounds

of silver ions with inorganic materials that provided an effective means of fully utilising the benefits of silver into manufactured items.

- hospital patient areas
- medical devices
- water treatment plants
- food service & packaging areas
- pharmaceutical labs
- childcare facilities
- other areas that need extra protection against microbes

### Performance

A number of DuPont Alesta® AM powder coatings have been tested by an internationally recognised microbiological testing laboratory for antibacterial performance using the JIS Z 2801:2000 Industrial Standard method, against the two most widely encountered and problematic organisms:- Staphylococcus Aureus (MRSA strain) and Escherichia (E) coli. With both Micro-organisms, at least a 3-log (i.e. 99.9%) reduction in population was seen compared to an unmodified control.

The long-term performance of the coating will depend to some extent on the cleaning methods, materials and frequency employed in service; but because the inorganic silver is uniformly distributed throughout the coated film, antimicrobial efficiency will continue throughout the life of the powder coating.

# Alesta® AM Powder Coatings are ideally suited for areas where clean is critical:

## High performance protection for nearly any surface Ideal for designers and manufacturers of:

### Food equipment

Mixing bowls, serving trays, salad bars, sinks, walk-ins, coolers, display cases, and serving counters

### Home Appliances

Refrigerators, washers, dryers, disposals, and trash compactors.

### Food Processing

Grinders, trays, conveyors, storage bins, slicers, and processing equipment.

### Medical

Instrument trays, racks, sterilization equipment, bedpans, counter tops, examination tables, carts, beds, and lighting fixtures

### Construction

Pushplates, kickplates, towel dispensers, doors, escalators, elevators, storage and restroom equipment.

**Alesta® AM Antimicrobial Powder Coatings gives you the freedom to explore new ways to innovate.**

