

# Antimicrobial Hard Surfaces

Technical Data Sheet

Nm<sup>TM</sup>  
Nanoman

THE SCIENCE of PROTECTION

## 1 Description

Nanoman Antimicrobial coating for hard surfaces has been engineered to destroy viruses, bacteria and germs on surfaces preventing the spread of these micro-organisms. It physically destroys 99.99% of viruses, bacteria and germs quickly reducing their ability to spread from surface to surface and surface to hosts.

Utilising advances in nanotechnology, Nanoman Antimicrobial kills viruses and bacteria. It covers the surface with a layer of bacteria and germ destroying “nano swords”. These nano-swords draw deposited microbes down onto the sword rupturing them rendering them ineffective and unable to spread infection.

## 2 Features and Benefits

- Destroys bacteria and germs, even those with layers protecting their amino acids and proteins.
- Excellent adhesion to hard substrates.
- Applicable for use on all hard surfaces including metal, plastic, glass, polished timber, and stone.
- High coverage rate, approximately 15mls per square metre
- Easy to apply.
- Invisible
- Suitable for use indoors and outdoors

## 3 Applications

Bacteria and germs are transmitted not only through droplet spray but also via various surfaces that can convey bacteria and germs from one person to another. Research has shown that bacteria and germs can remain viable on surfaces for an extended period of time of several days and even and even multiply on some surfaces.

These surfaces include door handles, switches, furniture, hand rails, bathrooms, public transport and any other public, private or workplace surface that has a high concentration of potential carriers that can touch and transmit the microbe to the surface.

It can be used by any industry and on any hard surface including:

- **Public transport** – Trains, trams, buses, taxis airplanes, boats, terminals, transport waiting areas
- **Office / Hospitals** – Workplaces, elevators, meeting rooms, hospitals, waiting rooms, aged care facilities, clinics
- **Airports** – Terminals, airplane, lounges, bathrooms, airport cafes
- **Education** – Schools, kindergartens, universities, community learning spaces, TAFE, places of worship facilities, libraries
- **Industries**- Restaurants, cafes, hotels, clubs, construction industry, cruise liners, shopping centres, sporting facilities, casinos, cinemas, and public buildings.
- **Personal Devices** – Phones, laptops, computers, touch screens and monitors

If using Nanoman Antimicrobial on direct food contact surfaces or in areas that come into contact with children, safe hygiene practices should be observed including the rinsing of these surfaces after use with water.



## 4 Surface Preparation

The most important step in the application process is preparing the surface. This is necessary to get rid of the invisible layer of biofilm that is present on every surface. To ensure the coating's maximum performance the surface must be **completely clean**, dry and free of all grease, dirt, oils, scale residue and other contaminants prior to application. Accordingly, the surface first needs to be thoroughly cleaned with a detergent. We recommend using paper towels and discarding these regularly to avoid spreading microbes around the surface.

## 5 Directions for Use

Shake the container before use and re-shake every 15-20 minutes to ensure the nano particles are fully suspended.

Once the surface has been thoroughly cleaned, spray and wipe on the Antimicrobial using a clean cloth.

If applying outdoors, the temperature should be between 5°C and 35°C with 90% relative humidity or less. Do not apply in wet conditions or where there is a likelihood of rain. Avoid windy conditions, if possible, when applying outside.

Nanoman Antimicrobial is available in DIY sized bottles and is designed for use by both consumers and professional cleaners. You don't need to be an expert to apply the products. Comes with simple to follow instructions and it is quick and easy to apply.

### Specific application instructions:

- The wearing of gloves is recommended.
- If applying commercially, please wear full PPE.
- If transferring contents to a smaller container, use a funnel.
- Prepare the surface by thoroughly cleaning it with a detergent cleaner. For best results use paper towels and discard these regularly.
- Shake bottle before applying.
- Spray the surface and using an application cloth or paper towels rub in thoroughly. Repeat until the entire area has been disinfected.
- Avoid applying too much coating. The recommended usage rate is 15 mL/m<sup>2</sup>.

### Cautions

- Do not use if air or surface temperature is below 5°C or above 35°C.
- Do not apply to hot surfaces and avoid open flames.
- Do not apply to external surfaces in rain or when rain is expected within 6 hours.
- DO NOT THIN. Shake contents thoroughly prior to use.
- Do not use with waterproofing products.
- Apply in a dust-free environment to avoid surface contamination.

### Working Conditions:

- The wearing of protective gloves/protective clothing/eye protection is recommended when using this product. Final choice of personal protective equipment will depend upon individual circumstances and/or according to risk assessments undertaken.
- Consult SDS for proper handling, clean-up, disposal, and use of personal protective equipment.
- Please ensure the area being treated is well ventilated.
- Avoid breathing in spray. Do not ingest or inhale fumes.
- Store in a sealed container and keep away from children.
- Ensure any overspray be wiped off adjacent surfaces with a dry cloth as soon as possible to avoid crystallisation.



## 6 Coverage

The average usage rate using a spray and wipe technique is 15ml per square metre.

Avoid applying excessive amounts of the coating. If there is an excess of coating on the surface, spread it out evenly using a clean sponge or soft cloth whilst it is still wet.

## 7 Dry Time

Allow to dry for 10 minutes.

## 8 Physical Characteristics

- Appearance: Colourless / Transparent
- Density: 0.81 g/m<sup>3</sup> - 0.85 g/m<sup>3</sup> (at 20° C)
- Chemical basis: Modified silicon dioxide (silan quat with adhesion promoter)
- Solvent base: Mix of Ethanol 100% denatured and di-ionised water
- Flash point: 23° C

## 9 Packaging

Nanoman Antimicrobial Hard Surfaces is available in consumer user sized and commercial sized containers:

- 125ml
- 250ml
- 750ml
- 1 Litre
- 2 Litre
- 5 Litre
- 20 Litre

## 10 Shelf Life and Storage

- Store in its sealed container and keep away from children.
- Unopened original containers can be stored for up to 2 years.
- Do not leave container open for extended periods
- Store out of direct sunlight and in a dry environment +5°C to +25°C.



## 11 Safety Instructions

The instructions on the Nanoman Antimicrobial Safety Data Sheet must always be followed.

- The wearing of protective gloves/protective clothing/eye protection is recommended when using this product. Final choice of personal protective equipment will depend upon individual circumstances and/or according to risk assessments undertaken.
- Keep out of reach of children
- Keep away from naked flames
- Do not smoke when using or handling
- Store in closed containers
- Do not ingest or inhale fumes

Consult SDS for proper handling, clean-up, disposal, and use of personal protective equipment

## 12 Surface Maintenance / Cleaning

Surfaces coated with Nanoman Antimicrobial do not need any special cleaning regime. For Nanoman Antimicrobial to be most effective, regular and customary cleaning and hygiene practices should be maintained. Cleaning surface washes and wipes away dead microbes and other contaminants.

## 13 Disclaimer

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Users should satisfy themselves that it is suitable for their needs. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. As we cannot control or anticipate the conditions under which this product may be used, each user should review the information in specific context of the planned use. To the maximum extent permitted by law, Nanotech Products Pty Ltd will not be responsible for damages of any nature resulting from the use or reliance upon the information contained in this data sheet. No express or implied warranties are given other than those implied mandatory by law.

Users should always refer to the most recent issue of the Technical Data Sheet available from [www.nanoman.com.au](http://www.nanoman.com.au)

Revised February 2024

