

# Antibacterial 365 Hard Surfaces

Technical Data Sheet

**Nm**<sup>TM</sup>  
Nanoman

THE SCIENCE of PROTECTION

## 1 Description

Nanoman Antibacterial 365 coating for hard surfaces has been specifically engineered to destroy bacteria and germs on surfaces providing continuous 24/7, 365 day protection preventing the spread of bacteria and germs from surface to surface and surface to hosts..

Unlike disinfectants and other surface cleaners that are effective only once at the time of application, Nanoman Antibacterial 365 works by continually destroying bacteria and germs that are deposited on to a surface. Like our long-lasting hydrophobic coatings, Nanoman Antibacterial 365 physically and molecularly bonds with the surface and is intrinsic to its make up providing the surface with a continuous long-lasting microorganism killing layer.

Nanoman Antibacterial 365 works completely differently to disinfectants, toxic chemical sanitisers. Utilising advances in nanotechnology, Nanoman Antibacterial 365 covers an entire surface with a layer of bacteria and germ destroying "nano swords". These nano-swords draw the deposited bacteria and bacteria down onto the sword immediately rupturing them rendering them ineffective and unable to spread infection. The nano coating has a "kill rate" of 99.9% making it one of the most effective surface protections against bacteria and germs available.

## 2 Features and Benefits

- Destroys bacteria and germs, even those with layers protecting their amino acids and proteins.
- Provides continuous 24/7, 365 day protection after a single application
- Excellent adhesion to hard substrates.
- High UV and chemical resistance
- Suitable for use indoors and outdoors
- Applicable for use on all hard surfaces including metal, plastic, glass, polished timber, and stone.
- Economical. High coverage rate, approximately 15mls per square metre
- Also helps prevent the spread of fungi
- Easy to apply.
- Cures at room temperature.
- Non toxic and VOC Free
- Invisible
- Eliminates the need to continually disinfect surfaces.

## 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 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 virus 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, public buildings.
- **Personal Devices** – Phones, laptops, computers, touch screens and monitors

Nanotech Products Pty Ltd,  
8/50-54 Howleys Road, Notting Hill, VIC 3168  
Phone: 1300 696 266  
info@nanoman.com.au | <http://www.nanoman.com.au>



## 4 Surface Preparation

The most important step in the application process is preparing the 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. The surface first needs to be thoroughly cleaned with a detergent. It then needs to be disinfected. Nanoman Pre-Cleaner containing >70% isopropyl alcohol is ideal for this, however any commercial grade disinfectant is satisfactory preparation for the surface as this will eliminate any, bacteria or germs from the surface.

The surface must remain untouched while it is drying to stop any potential contamination. Once dry Nanoman Antibacterial 365 should be applied to the cleaned surface.

## 5 Directions for Use

Ensure surface has been prepared properly and is clean and dry. We recommend using Nanoman Pre-Cleaner to properly prepare the surface prior to applying Nanoman Antibacterial 365. If applying outdoors, make certain the temperature is 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.

Shake the container before use and re-shake every 15-20 minutes to ensure the nano particles are fully suspended. Apply by spraying directly onto the surface or onto an application cloth or paper towel and then, thoroughly wipe into the surface to ensure total coverage. The surface should be allowed to dry for at least one hour (longer if in high humidity).

Nanoman Antibacterial 365 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.
- Clean surface with a detergent cleaner
- Disinfect surface with Nanoman Pre Cleaner or suitable disinfectant.
- Shake bottle before applying to a clean & dry surface.
- Spray the surface and using an application cloth or paper towels and rub in thoroughly. Repeat until the entire area has been treated.
- Avoid applying too much coating. The recommended usage rate is 15ml/m<sup>2</sup>.
- Apply a single coat only.
- Allow to dry/cure for 60mins.
- Ensure surface stays dry and untouched during this hour.
- Protective coating will reach its optimal performance after 6hrs. Keep dry (if possible) during this period.

### Cautions

- Do not use if air or surface temperature is below 5°C or above 35°C.
- 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 apply to hot surfaces.
- 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.
- Store in a sealed container and keep away from children.
- Clean equipment immediately after using.
- Ensure any overspray be wiped off adjacent surfaces with a dry cloth as soon as possible to avoid crystallisation.

If applying commercially or to very large areas you can use an Electrostatic Sprayer for application. Please contact us for further details about this.

## 6 Coverage

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

If applying using an electrostatic sprayer the coverage required is closer to 10ml

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 Cure Time

Nanoman Antibacterial 365 requires at least 60 minutes to dry during which time the surface should remain completely dry and untouched. It starts protecting the surface after it dries but requires a further 6 hours curing time before it reaches its optimum protection capabilities. It is recommended the surface remain untouched during this curing phase.

## 8 Physical Characteristics

- Appearance: Colourless / Transparent
- Density: 0.98 g/m<sup>3</sup> - 1.01 g/m<sup>3</sup> (at 20° C)
- Chemical basis: Modified silicon dioxide (silan quat with adhesion promoter)
- Solvent base: Deionized water
- Flash point: N/A

## 9 Packaging

Nanoman Antibacterial 365 Hard Surfaces is available in consumer user sized and commercial sized containers:

- 125ml
- 250ml
- 750ml
- 1 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 12 months.
- Do not leave container open for extended periods
- Recommended storage and transport temperature: +5 to +25°C.
- Store out of direct sunlight and in a dry environment.

## 11 Safety Instructions

The instructions on the Nanoman Antibacterial 365 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
- 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 Antibacterial 365 do not need any special cleaning regime. For Nanoman Antibacterial 365 to be most effective, regular and customary cleaning and hygiene practices should be maintained. Cleaning surfaces washes and wipes away dead microbes and other contaminants that can cover the “killing field” of nano swords, diminishing its ability to destroy microbes that are deposited on the treated surface.

The longevity of the coating has been tested in accordance with ISO11998

- Metals 20,000 cycles
- Glass 40,000 cycles

## 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)

