

Fabric + Textile

Technical Data Sheet

NmTM
Nanoman

THE SCIENCE of PROTECTION

1 Description

Nanoman Fabric + Textile is an innovative fibre protection product that protects almost all types of fabric and textiles against water, dirt and stains. It is totally invisible and does not effect the fabrics appearance, its ability to breath or feel.

It can be used on suede and leather as well as wool, cotton, synthetics and silk.

Nanoman Fabric + Textile surrounds every fibre with a matrix network of nanoparticles that are extremely hydrophobic and oleophobic; that is, they repel both liquids and contaminants. Liquid spills will either run off or sit on top of the fabric and can be easily shaken off or soaked up using a paper towel or similar. The liquids will not soak into the material, eliminating any potential staining.

The solid bond with the fabric fibres enables an excellent abrasion and washing machine resistance, meaning that when applied to clothing, it remains effective for up to 6 months of normal regular washing. On non-washables the effect will remain for up to 2 years.

The durability of Nanoman Fabric + Textile depends on several factors, such as the frequency of wear, cleaning and mechanical abrasion. In ideal conditions a single treatment could last up to three years. Assuming "average" use and cleaning we provide the following as a guide.

- Clothing/Uniforms: 3-6 months (with mild, pH neutral washing)
- Shoes and bags: 12 months.
- Carpet and furniture: dependent on use and traffic: 1 – 2 years.
- Awnings, Umbrellas and Marquees: 2 - 3 years.

2 Features and Benefits

- Long lasting protection for a wide range fabric and textiles including cotton, leather, nubuck, suede, polyester, wool and silks .
- Quick and easy to use.
- Perfect protection for clothes, furniture and carpets,.
- Liquids such as milk, coffee or wine will not permeate textiles.
- Maintains the look, feel and characteristics of the material
- Repels liquids and minimizes stains.
- Totally invisible
- UV-stable (i.e. will help prevent discolouration due to sunlight)
- Non allergenic and environmentally friendly.
- Water based and harmless to your skin.
- Certified to the OEKO-TEX Standard 100.
- Can be used indoors and outdoors.
- Prevents mould on outdoor awnings and umbrellas.

Nanotech Products Pty Ltd,
Unit 3, 40 Ricketts Rd, Mount Waverley 3149

Phone: 1300 696 266

info@nanoman.com.au | <http://www.nanoman.com.au>



3 Application

- All types of clothing and footwear, especially outdoor wear.
- Indoor upholstery such as sofas, chairs, table cloths and bedding
- Carpets
- Car seats and public transport seating
- Outdoor furniture
- Canvas umbrellas, marquees, awnings and shades
- Carpets.
- Outdoor furniture.
- Canvas umbrellas, marquees.
- Awnings and shades.

4 Surface Preparation

Ensure that surface to be coated is clean, dry and free of any other coatings including cleaning agents prior to application.

If Nanoman Fabric +Textile is applied to an article of clothing to be worn, we recommend that the article be washed first and then all traces of washing powder and/or fabric softener be removed by rewashing in water only. For other applications vacuum and clean the fabric or leather surfaces to be coated to ensure loose dirt and fibres are removed, prior to applying Nanoman Fabric + Textile.

5 Directions for Use

Ensure surface has been prepared properly and is clean and dry

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

Simply spray on Nanoman Fabric + Textile from a distance of about 15cm to the fabric to fully dampen but not saturate the fabric / material. If applying to leather, use a soft clean cloth to rub in the coating and do not let it pool. When applying to furniture, we recommend agitating the coating in with a soft bristle brush to ensure all the fibres of material are covered.

For application on carpet we recommend a wet-on-wet application (i.e. two coating) with some gentle agitation (soft bristle brush or rubber blade) to work the coating into the carpet strands between each spray.

The surface is usually touch dry in 2 hours but be allowed to dry for 24 hours before use (longer if in high humidity).

Nanoman Fabric + Textile is available in ready to use spray bottles and is designed for use by both consumers and professional cleaners and manufacturers. You don't need to be an expert to apply the products.



Specific application instructions:

- Ensure the surface is dry, clean, free of any dirt, loose fibres and has not been treated with any other coating. Remove all pre-existing coatings and marks prior to application.
- Shake bottle prior to application.
- Spray on evenly over the fabric at a distance of approx. 6 inches (15cm) until the entire surface is damp. If protecting leather use a soft cloth to rub in evenly. If applying to furniture or clothes brush in the coating with a soft bristle brush.
- Let it dry/cure for 24 hours and it is ready for use.
- Amount to be applied depends on absorbency of fabric. (Avg. 60 to 80ml M2). Apply one coat only (except if treating carpet).

Cautions

- Do not apply to external surfaces in rain or when rain is expected within 12-24 hours.
- DO NOT THIN. Shake contents thoroughly prior to use.
- Do not use with other waterproofing products.
- Apply in a dust-free environment to avoid surface contamination.

Working Conditions:

- The wearing of protective gloves/protective clothing/eye protection/face protection is recommended when using this product for large scale applications or when using HVLP spray equipment.. 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.
- Avoid breathing in spray.
- Store in a sealed container and keep away from children.
- Clean equipment immediately after using.
- Protection of adjacent porous areas from overspray and runoff is recommended but not necessary for non-porous surfaces.
- Ensure any overspray be wiped off adjacent with a dry cloth as soon as possible.

6 Coverage

Consumption will vary depending upon on the absorbance of the material, however expected usage is between 60 and 80ml/M²

Some highly absorbent fabric may require 100ml/M²

Carpet is usually highly absorbent and each application will require 80 – 100ml per M2 so wet on wet application will require 160-200ml/M²

The durability of the coating is dependent on several factors including, the type of material or item that it is applied to and the mechanical stress applied to the surface. For items that are washed regularly (eg. once a week), the affect will last for up to 10 washes. For items not subject to washing the affect will last for up to 2 years.



If the performance of the coating starts to deteriorate, another application coating should be applied to re-establish full protection. This will not damage the material in any way.

7 Cure Time

Touch dry in 60 min, however for best results allow coated material to dry for 24 hours.

8 Physical Properties

Colour:	Colourless to light yellow
Flash Point:	None
pH:	6-7
Solvent:	Water
Specific gravity:	1.002-1.006
Odour:	Odourless
VOC Content:	Below detectible limit
Boiling Point:	>97 °C

<u>Colour:</u>	<u>Colourless to light yellow</u>
<u>Flash Point:</u>	<u>None</u>
<u>pH:</u>	<u>6-7</u>
<u>Solvent:</u>	<u>Water</u>
<u>Specific gravity:</u>	<u>1.002-1.006</u>
<u>Odour:</u>	<u>Odourless</u>
<u>VOC Content:</u>	<u>Below detectible limit</u>
<u>Boiling Point:</u>	<u>>97 °C</u>

9 Packaging

Nanoman Fabric + Textile is available in the following pack sizes:

- 250ml, 750ml, 1L with appropriate application sprayers
- 2L, 5L, 20L bulk bottle

10 Shelf Life and Storage

- Unopened original containers can be stored for at least 2 years in cool conditions.
- Opened containers can be stored for up to 12 months in cool conditions.

11 Safety Instructions

The instructions on the Nanoman Fabric + Textile Safety Data Sheet must always be followed.

- Store in a sealed container and keep away from children.



- In the event of eye contact, wash out immediately with cold water . Seek medical advice if necessary.
- Do not swallow. Seek medical advice if necessary.
- Recommended storage and transport temperature: +3 to +30oC
- For spills DO NOT scrub the fabric, soak up the spill with a paper towel and damp cloth / sponge.
- The wearing of gloves is optional but recommended.
- Please ensure the area being treated is well ventilated.
- When applying outside avoid applying in windy conditions.

12 Surface Maintenance

With Nanoman Fabric + Textile, there is no need for additional cleaning or maintenance. Coated surfaces become strongly hydrophobic repelling both water and contaminants. Liquid spills will either run off or sit on top of the surface and can easily be soaked up using a paper towel or similar. To completely remove marks, gently dab with a damp cloth.

Do not scrub or allow spills to remain on the coated surface. Remove spills with a paper towel or damp cloth. To remove marks dab fabric with a damp cloth. Do not rub or scrub fabric.

Items such as clothing that are washed regularly will remain washing agent resistant for up to 10 washes or 6 months (depending on material) before a reapplication may be required.

Do not attempt to physically rub liquids into the fabric to test the coating, there is heightened probability of damage and staining which may occur. It is important to understand that Nanoman Fabric + Textile is aimed at protecting against everyday accidental spills and general wear and tear due to accidental liquid spillages.

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

Revised February 2024

