



# TECHNICAL DATA SHEET



## WARRIOR™ SILVER SURFACE SHIELD

### Description

Warrior™ Silver Surface Shield is an antiviral product developed by Reinste Nano Ventures Pvt. Ltd. Using Nano silver technology, this product is capable of killing up to 99.99% virus (**as per anti viral test for nonabsorbent surfaces as per ISO: 21702 against SARS CoV-2**) on any **external glass, ceramic and polished stone surface**. The tried and tested nano silver technology helps in not only tackling bacteria and fungus, but also helps in fighting viral spread and growth. Its high coverage area per litre and durability over time makes it a better coating than any other product.

### Application Areas

It can cover glass, ceramic and polished stone surfaces (best suited for external surfaces) making it useful in various application areas like:

- 1) Glass surfaces (bus/train windows, glass doors, shower cubicle)
- 2) Polished stone (park seats, swing poles)
- 3) Ceramics surfaces (tile walls, outdoor flooring, playgrounds)

### Benefits

Along with a strong antiviral property, it also provides additional benefits like:

- 1) Hydrophobicity
- 2) Longer durability time
- 3) Dirt repellent
- 4) Easy application
- 5) Variety of external surfaces covered with one product
- 6) Smooth finish
- 7) Chemical weatherability
- 8) Scratch resistance
- 9) UV Stability

### Product Description

**Product Code :**

RN-VW3

**Product Variants:**

RN-VW3-L (Slight grade)

RN-VW3-M (Significant grade)

RN-VW3-H (Strong grade)

**Composition:**

Silica based solvent base coating along with active silver as antiviral agent.

**Shelf life:**

2 years from day of order



**Theoretical Coverage:** 1500-2000 sq.ft. /L  
**Packs Available:** 1L, 5L and 20L

### **Technical information**

<b>Physical state:</b>	Liquid
<b>Colour:</b>	colourless (transparency :100%)
<b>Odour:</b>	alcohol odour.
<b>Odour threshold:</b>	80 ppm
<b>pH:</b>	1 - 3 (500g/l;20°C)
<b>Boiling point:</b>	78 °C
<b>Flash point:</b>	< 21 °C
<b>Vapour pressure:</b>	57 hPa Ethanol
<b>Density:</b>	0.8 (0.77 - 0.83) g/cm <sup>3</sup> (20°C)
<b>Solubility:</b>	Water: Slightly miscible
<b>Viscosity, dynamic:</b>	1 - 10 mPas (20°C)
<b>Lower explosive limit(LEL):</b>	3.5 vol%
<b>Reactivity:</b>	Flammable liquid and vapor
<b>Chemical Stability:</b>	Stable under normal conditions (pH1-13)
<b>Layer Thickness :</b>	100-120nm
<b>Hydrophobic:</b>	105° and 115°(20µl)
<b>Oil Resistance:</b>	80° and 85°(20µl)
<b>Slip angle:</b>	<25°
<b>Thermal Stability:</b>	250°C permanent, 450°C peak
<b>Weather Resistance:</b>	3500h pursuant to ISO 11507A
<b>Durability:</b>	>20,000 cycles pursuant to ISO11998
<b>Salt Water Resistance:</b>	Yes

### **Application**

#### **Pre-Cleaning steps**

- Recommended to use gloves while using this product.
- Clean the surface and make it dry and dirt free.
- Shake the coating well before use.

#### **Coating Application steps**

##### **MANUAL APPLICATION**

- The coating is easy to handle and simple do-it-yourself application makes it easier for end customers to apply it.
- Pour the coater in a spray bottle.
- Spray the coater over the surface you want to coat.
- Wipe the treated surface with microfiber cloth until it dries and no streaks are visible.
- Let it dry for 24 hours for curing.



### OR

- Pour the coater in a wide mouth container.
- Use a paint brush or roller to apply it on the surface.
- Wipe the surface till it dries and no streaks are visible.
- Let it dry for 24 hours for curing.
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### INDUSTRIAL APPLICATION

- Uniform spraying or Dip coating systems in order to apply the product evenly to the surface (HVLP-sprayers, aerosols, HDPE trigger Sprayers, industrial spray systems).
- Wipe the surface with microfiber cloth till surface is dry and no streaks are visible.

*Note: Drying and ageing Times time is subject to proper conditions such as temperature and humidity, good airflow and film build of the topcoat*

### Post Cleaning Care

- Remove any stains over coated surface using micro fiber cloth.
- Remove all dirt using a clean cloth or duster. Always remove dirt from top to bottom, It helps dirt to smudge.
- Do not use any other coating after using Silver Surface Shield.
- Post care will increase the protection time.

### Safety Features

- Kindly refer to the MSDS for WARRIOR™ SILVER SURFACE SHIELD. which gives detailed information on safety measures while handling the coating.
- Keep out of reach of children.
- May be harmful if swallowed. In case of ingestion seek immediate medical attention.
- Wear eye protection during application. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- In case of skin contact immediately wash skin with soap and plenty of water. Get medical attention if irritation develops.
- Avoid inhalation of coating vapour. It is recommended to wear suitable mask during use and preparation.
- Left-over cleaners/containers should not be disposed in soil/drains. Consumers should consult a local recycling agency for proper disposal of paint/drums.
- Should be kept in ventilated space, far from heat/flame.

### Precautions

- Apply at room temperature.
- Stir well before use.
- Use coating on small surface before using on large surface for test results.



- Ensure the surface is fully covered/wet by the coating.
- This is not a medical product, should not be applied on body.

### **Storage**

- Keep it in dark and cool place
- Could be stored for 24 months in ambient condition and original packing.

### **Disclaimer**

*"Reinste Nano Ventures Pvt Ltd (REINSTE) warrants to the Buyer that this product is in good quality and conforms to the manufacturer's specifications in force on the date of manufacture and when used in accordance with the installation Instructions and when stored as directed in the technical literature. Manufacturer cannot warrant or guarantee any method of use, performance or application under any particular condition and Buyer is responsible for determining the suitability of intended purpose and assumes all risks therein. REINSTE shall not be liable for any injury, loss, cost of labor or consequential damages either directly, indirectly, or incidentally, arising out of the use or misuse of any product sold by REINSTE or another distributor. If the product is proven to be in non conformance, the Buyers sole remedy shall be a refund of the purchase price or replacement of the product. This is not a medical device & for use only as a paint/ coating, does not guarantee against infections and is not a cure."*

### **For Technical/Application support, contact us:**

Reinste Nano Ventures Pvt. Ltd.,  
A-118, Level II, Sector 63, NOIDA, Uttar Pradesh, India, Pin-201301  
E Mail:[info@reinste.com](mailto:info@reinste.com) Phone:0120-4781212/213 Mob:9810662669

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