

NANO-CERAMIC®



WWW.NANO-CERAMIC.COM INDUSTRIAL PROTECTIVE COATINGS



Aviation

What is NANO-CERAMIC Thin Film Coating?

NANO-CERAMIC Thin Film Coating is a revolutionary, ultra-hard and long-lasting ceramic surface coating that provides superior scratch resistance and semi-permanent protection for all factory aircraft paints and for all aerospace materials like aluminum and carbon.

What makes NANO-CERAMIC Thin Film Coating so different?

NANO-CERAMIC Thin Film Coating forms super-durable molecular bond with the surface and is more than 4 times stronger than traditional clear coating. This allows NANO-CERAMIC Thin Film Coating to effectively absorb damage that would otherwise affect the factory paint, significantly diminishing the formation of swirl marks and light scratches and protecting and preserving the factory paint from environmental damage and corrosion, which can cause major maintenance issues over time.



Conventional paints are simply not strong enough and turbine blades are easy corroded.

Commercial Planes are normally painted every seven to ten years and they have to be stripped of the old paint before any new paint can be applied. The costs are enormous and weigh heavily on the overall maintenance costs.

NANO-CERAMIC Thin Film Coating is completely resistant to acidic environmental substances, such as bird droppings and acid rain, and to oxidation, unlike your factory aircraft paint and aluminum parts which can be permanently damaged.

NANO-CERAMIC Thin Film Coatings will not etch or dissolve when in contact with harmful substances like salts, fuels, and hydraulic fluids, maintaining the clean and original surface.

What are the benefits of applying NANO-CERAMIC Thin Film Coating?

NANO-CERAMIC Thin Film Coating will provide aircraft with a superior clear coat film that, on winglets, can withstand 600+ mph winds at 30,000 feet above the earth. It is resistant to chemical etching, is much harder than factory aircraft coatings, will reduce swirl marks and scratches, and has a semi-permanent hydrophobic surface that is much easier to clean, and stays cleaner longer. Even chrome, aluminum, and other metals can have added protection, as our coatings can withstand temperatures of over 1800°F.

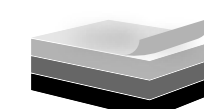
Cleanliness and smoothness of the aircraft fuselage, together with our thin ceramic coating on the turbine blades, which allows a higher operating temperature in the turbine, by preventing thermo-mechanical fatigue failure (TMF) cracks, are the main drivers for fuel savings or penalties.



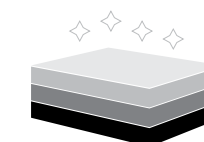
YouTube



Step 1 Surface layer of factory clear coat is damaged and contaminated.



Step 2 Technician decontaminates and polishes clear coat to produce a smooth and even surface.



Step 3 Coating thickness will be restored with a superior NANO-CERAMIC layer.





SIO3 GLOSS

Fuselage & Windshield Protection incl. turbine blades



Product ID	: SIO31A00-32oz 8 Micron SIO21A00-32oz 2 Micron
Consumption	: +/- 0.007oz / ft ²
Reachable area	: +/- 5.000ft ² Body + 5.000ft ² Windshield
Used for	: Gelcoat, acrylic, aluminium
Application field	: Aviation

Your aircraft will stand out! This Kit-Set contains all to protect your plane with a High-Tech ceramic thin film coating.

- Two simple steps: Clean with our Steril Cleaner and Apply
- The original surface is protected against corrosion.
- Makes the surface anti scratch, much easier and quicker to clean, and the adhesion of dirt is reduced drastically.
- Save on fuel because smoother fuselage and on repaints.
- Our thin film coating on the turbine blades allows a higher operation temperature in the turbine which improves the fuel yield

This coating has an outstanding hydrophobic effect, and the surface stays cleaner longer. Cleaning intervals as well as the formation of water spots will be greatly reduced.

Expected Life Duration up to 5 Years+ (2 Years on Glass)

How to use: Page 10

- Easy to apply
- Cut cleaning costs
- Anti-water spot
Anti-corrosion
- Super hydrophobic
- Self-cleaning
stays cleaner longer
- Anti-scratch
- Save on fuel
Save on repaints
- Protects your investment

Applicator:



SIO5 MATTE

Fuselage & Windshield Protection incl. turbine blades



Product ID	: SIO51A00-32oz 2.5 Micron SIO21A00-32oz 2 Micron
Consumption	: +/- 0.007oz / ft ²
Reachable area	: +/- 5.000ft ² Body + 5.000ft ² Windshield
Used for	: Gelcoat, acrylic, aluminium
Application field	: Aviation

Your aircraft will stand out! This Kit-Set contains all to protect your plane with a High-Tech ceramic thin film coating.

- Two simple steps: Clean with our Steril Cleaner and Apply
- The original surface is protected against corrosion.
- Makes the surface anti scratch, much easier and quicker to clean, and the adhesion of dirt is reduced drastically.
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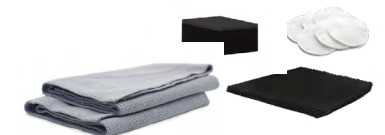
This coating has an outstanding hydrophobic effect, and the surface stays cleaner longer. Cleaning intervals as well as the formation of water spots will be greatly reduced.

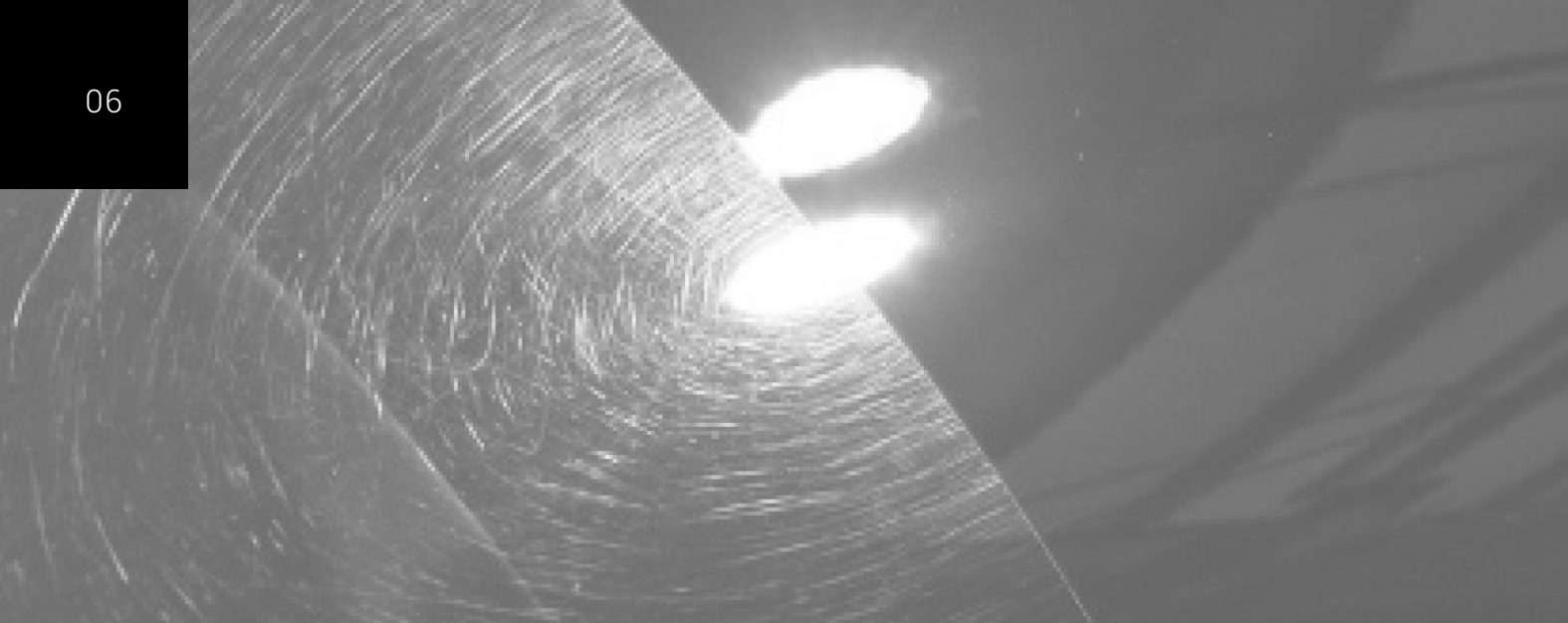
Expected Life Duration up to 5 Years+ (2 Years on Glass)

How to use: Page 10

- Easy to apply
- Cut cleaning costs
- Anti-water spot
Anti-corrosion
- Super hydrophobic
- Self-cleaning
stays cleaner longer
- Anti-scratch
- Save on fuel
Save on repaints
- Protects your investment

Applicator:





STEP

One Step Polish contamination remover

Product ID : STEPG250 8.5ooz
Consumption : 0.017/ft²
Used for : Gelcoat, acrylic, aluminium
Application field : Aviation

Only this High Quality Polish Compound together with the recommended pads assure that every plane can be polished from deep scratches till high gloss/zero swirl in one single step. This saves an enormous amount on working hours as polishing takes normally 65% of the total process to make a plane or helicopter a thin film nano layer.

Recommended Polishing Pads

Purple Wool Heavy Cutting Pad cuts like natural sheepskin but finishes like a polish pad. Aggressively removes medium scratches, leaving a lustrous finish with no hazing by reducing compounding swirls.

The Cutting Pad is constructed with a blue foam and white microfiber. The Micro Cutting Pad with orange foam and white microfiber, the Polishing Pad is constructed with a black foam and black microfiber.

The pad serie is available 5.5 inch and 3 inch.



SKU-40201008-5.5INCH
SKU-40201408-3.0INCH



SKU-40201101-5.5INCH
SKU-40201501-3.0INCH



SKU-40201206-5.5INCH
SKU-40201608-3.0INCH



SKU-40201302-5.5INCH
SKU-40201702-3.0INCH



CLEAN

Steril Cleaner for hard surfaces



Product ID : CLEAN0500 16oz / CLEAN5000 1.32gal
CLEAN020L 5gal
Consumption : +/- 0.01oz/ft²
Used for : Gelcoat, acrylic, aluminium, stainless
Application field : Aviation

100% Steril with nano interlock technology (active lifting encapsulate the grease from the surface)

- Surface cleaning and residue removal.
- Cleaning gloves, notebooks, phones or any other item entering the cleanroom.
- Wipe down for pass-through to controlled environments.
- Pretreatment for the application of thin film coating

100% Steril

-  **Easy to apply
spray & wipe**
-  **Indoor
Outdoor**
-  **Remove grease**
-  **100% Steril**
-  **Visibility
Safety**

Applicator:





SHRE

Pure Shine Shampoo for all exterior surfaces

Product ID : SHRE1000 32oz / SHRE5000 1.32gal
SHRE020L 20L 5gal (Drum pack on request)

Consumption : 0.7oz : 2.5gal Water

Used for : Cleaning all exterior surfaces

Application field : Aviation



SHRE1000L SHRE0500L

Reactivating Pure Shine Shampoo is an advanced technology, multi-purpose foaming cleaner containing a rinsing aid that will leave hard surfaces nearly dry after rinsing with clean water.





To assure the "easy-to-clean" effect that our nano layers provide, surfaces should be free of dyes, waxes or polymer sealants.

This multi-purpose cleaner contains no polymers or colors and will not leave a film of chemicals behind on the surface.

100% Safe to use for cleaning all non-porous surfaces and meets food grade classification for kitchens.

Contains no colouring chemicals which can discolor surfaces.

Dilution ratio 1: 500 (super economical)

-  **Easy to apply**
-  **Easy to clean**
-  **Stays cleaner longer**
-  **Food grade**

Applicator:



MPCL

Multi Purpose Cleaner for all interior surfaces

Product ID : MPCL0500 16oz / MPCL5000 1.32gal
MPCL020L 5gal

Consumption : 0.017oz/ft²

Used for : Cleaning all interior surfaces

Application field : Aviation



The All-Purpose Cleaner is a fast, all-surface interior cleaner, low foaming, odor free, and especially suitable for removing stubborn stains from carpets, fabrics, vinyl, plastics and leather safely.

- It is very easy to clean dirt.
- Ready-to-use mixture with the right chemical strength and safe to use
- Of course it is safe for the surface of fabrics, carpets, plastics, leather, rubber and does not fade paint.
- Quickly remove dirt, dust and food scraps

Safe to use does not harm the surface

-  **Easy to apply spray & wipe**
-  **No discoloration**
-  **Indoor Outdoor**
-  **Quick to use**
-  **Spills are easy to remove**
-  **Cleaner for longer**

HOW TO USE:

NANO-CERAMIC SIRP-SIO3-SIO5 MAX Thin film coatings

These products can be stored for up to 24 months (*in a dry, temperature-stable, dark environment*)

Ambient temperature:

41-86°F Avoid direct sunlight and/or high air humidity.

CLEANING

Clean the surface thoroughly with our Steril Cleaner until it is absolutely clean. If necessary, use our Scrub Cleaner or Reactivating Pure Shine Shampoo in advance. Make sure that all contamination is removed so that the glass coating can bind properly onto a clean surface. Make sure that the surface is completely dry before application!

APPLICATION OF SIRP

Spray a layer of nano SIRP on the surface and rub it in with a dry microtowel, keep rubbing it into the surface with strong pressure and wipe until all the product is even and scrubbed and only a little hazing / residue is visible **gently** wipe off this hazing / residue with a clean microfiber cloth after about a minute There is only a little pressure needed to remove the hazing completely. Curing time 1 hour.

APPLICATION OF SIO3-SIO5-MAX

Our coatings have best results on new on almost like new surfaces, we recommend to polish the surface if needed. Wear nitril gloves to clean the surface with our Steril Pretreatment Cleaner. (without wearing gloves, the oil from your hands may appear via the towel onto the surface) !!

Use more than one clean cloth to remove the dirt from the surface. (Please make sure you don't brush the dirt around on the surface by using dirty clothes.) Making the clearcoat-chrome-glass-surface clean is the most important issue. If the surface is not super steril than you will experience chemical reactions between our coatings and the still available contamination what is then visible into the ceramic layer when it is cured. In that case you will need to polish the surface again. So please don't hurry in carrying out this preparation work, but instead focus on this for 100%.

Learn the right application technique > Watch and Study the Apply Video scanning the QR Code on this page or on the packaging

(fragment **BASE COAT**) **OPTIONAL**

Use nitril gloves! Remove the plastic inner closure from the bottle and put in the dripper. Shake bottle before use! We recommend to apply the surface in easy to handle segments of about 15"x 15"inch, following the panels shape and corner lines and use these lines for overlaps. Put 8-10 drops BASE COAT on the suede mini towel using the applicator block underneath, devide the coating properly by going 3 times over the same surface, wait till it lights up (+/- 25sec) and remove the residue carefully, and buff it lightly use a separate micro towel for this. Wait 2 hours before you continue with the application of one of our hydrophobic Top Coatings. After 2 hours BASE COAT is 80% cured and ready to receive one of our TOP COATINGS. After about 7 days the BASE COATING has been fully cured and is almost unremovable.

(fragment TOP COAT **SIO3-SIO5-MAX**)

Use nitril gloves! Remove the plastic inner closure from the bottle and put in the dripper. Shake t

he bottle before use! We recommend to apply the surface in easy to handle segments following the panel shape and corner lines and use these lines for overlaps.

Put 6-8 drops 40x40cm (15"x 15"inch), (if start use more drops as the towel is otherwise too dry) TOP COATING on the suede mini towel using the applicator block underneath. Start dividing it from out of the middle of the surface and keep spreading it around by light pressure in criss-cross motions until the product is evenly distributed.

MOST IMPORTANT keep on doing this till no product residue is visible anymore. If you use too much coating and/or spreading it out from example one start position in a corner of a panel then you will not be able to divide it properly towards the other side and it will roll-up on each other and form a not equal layer. To use too much coating and not divide it equally is the second most critical point !!

When you apply TOP COATING in this correct way, then there is no need to use a micro towel for polishing anymore.

(fragment **SAFETY VISION**)

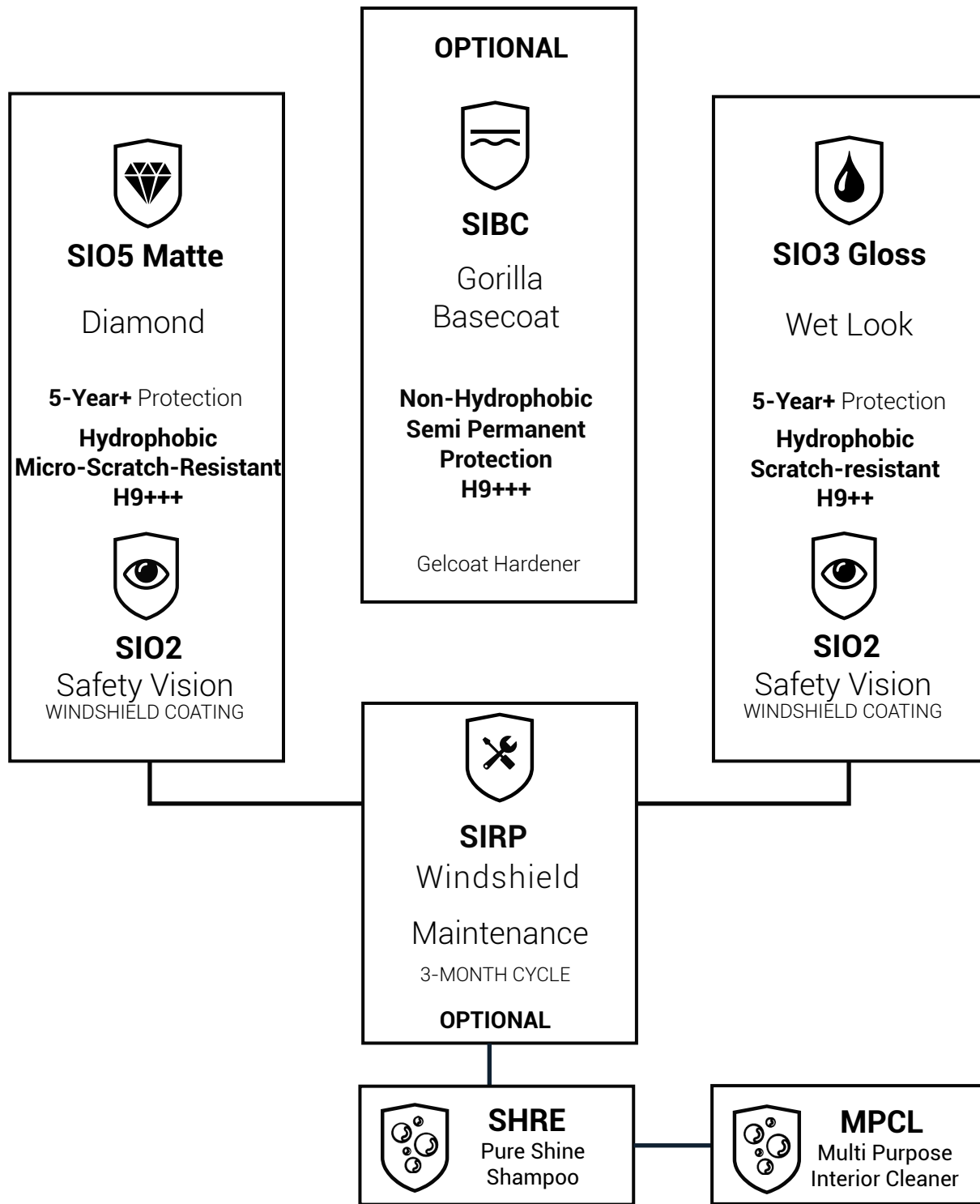
Apply the nano layer SAFETY VISION COATING with the cotton apply pad. Spread 10-15 drops 50x60cm (20"x 25"inch) of SAFETY VISION COATING on the cotton pad and apply rubb it in motions on the windshield with firm pressure until all of the product is evenly distributed and only very little residue is visible.

Remove the coating residue with a soft clean microfiber cloth after about a minute and buff the glass/panels gently to take the veils away. There is not much pressure necessary to remove it completely. Note: dry the dripper and close the bottles tightly if you want to save the content for future use. At normal ambient temperature the Nano layers are sufficiently cured after approximately 6 hours (or 2 hours Infrared) (avoid water contact during this time).

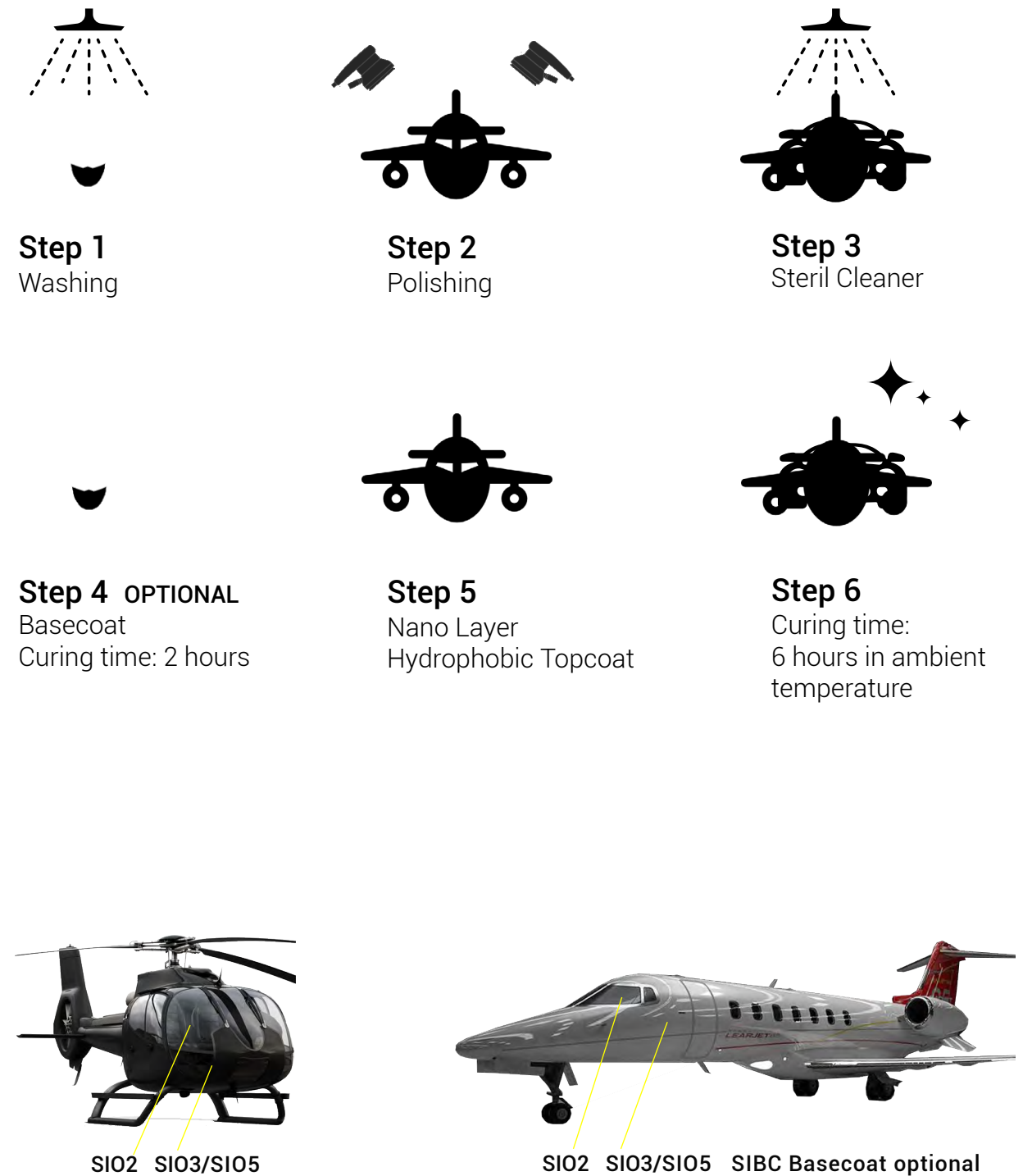
Application Video **SGS Cert.**



Thin Film Protection Plan for Aircrafts Fuselage, Windows and Turbine Blades



Thin Film Maintenance Plan



What is NANO-CERAMIC Permanent Coating?

NANO-CERAMIC permanent coating is the latest generation of protective coating which transforms paint into a hard ceramic, providing superior scratch resistance and permanent protection for all exterior or interior surfaces.

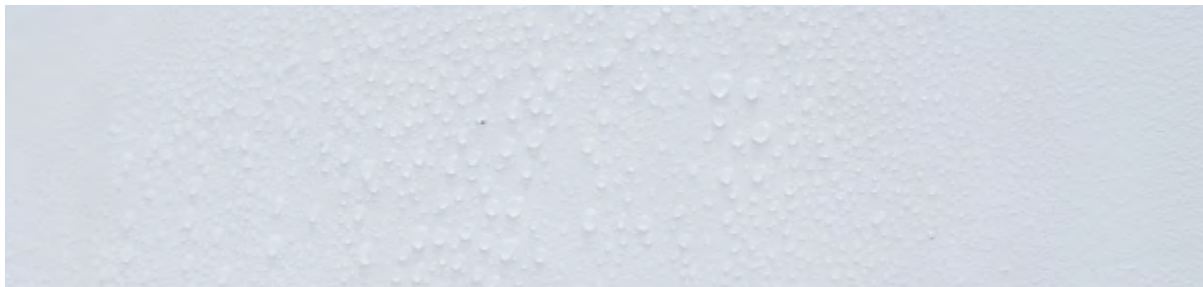
NANO-CERAMIC permanent coating is 600°F resistant and more than 6 times stronger than traditional acrylic based paint finishes, and is effectively preventing damage that would otherwise affect the appearance and integrity of the original surface.

Proved Quality

Our NANO-CERAMIC permanent coating is rigorously tested by an independent testing laboratory according to the European standard for outdoor paints (EN 1504-2) please find the test report on our website.

Can NANO-CERAMIC Permanent Coating be applied on any surface?

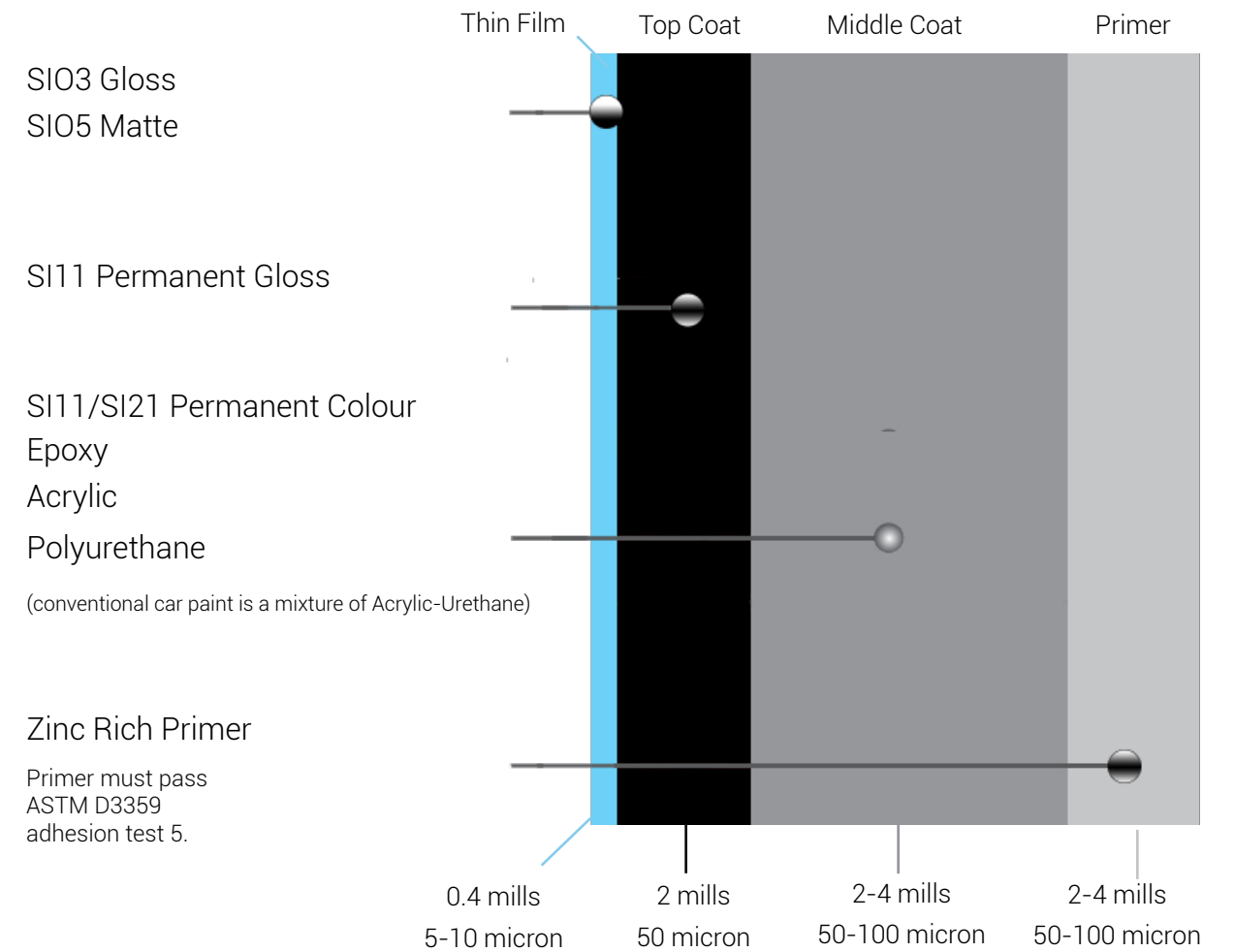
The NANO-CERAMIC permanent coating can be applied directly or indirectly on all kinds of interior and /or exterior surfaces (absorbing and non-absorbing), such as Aluminum steel, acrylic, and many more.



Is NANO-CERAMIC Permanent Coating self-cleaning?

NANO-CERAMIC permanent coating provides a permanent hydrophobic surface that is self cleaning, easier to clean and stays cleaner longer as water and dirt can not penetrate the ceramic layer. NANO-CERAMIC permanent coating is resistant to water vapor and water absorption.

Cross Section of Coating System



Conventional paints

Conventional gelcoats are a mixture with Epoxy or polyester resins, of which the quality of resin and pigments are the most important factor in the ultimate strength.

Most have a lifespan of 15 years, with hardness and color retention (sun fading) being the most common problems in keeping the desired object at an aesthetically pleasing level.

There is no better option than protecting your fleet with a NANO-CERAMIC Thin Film or Permanent Coating!

Do not wait till the surface get worse, most easy is to apply wipe or spray when the surfaces are still in new or in nearly new condition and the cost do not outweigh the benefits



SI11

2-Component (2K)

Topcoat Transparent

for glossy surfaces



How to use: Page 18

Product ID	: SI112000 64oz / 4.2 lbs
Consumption	: 3 layers 0.06lbs/ft ² - 0.96oz/ ft ² = 3 mil/ 70ft ²
Reachable area	: 2 layers 0.04lbs/ft ² - 0.64oz/ ft ² = 2 mil/140ft ² : 1 layer 0.02lbs/ft ² - 0.32oz/ ft ² = 1 mil/210ft ²
Hardness	: H9
Used for	: Fiberglass, steel, aluminium, plastics, wood
Application field	: Aviation marine, exteriors, interiors

SI11 is an incredibly strong 2-component paint system which forms a durable matrix of molecular bonds (transformation to ceramic) resulting in permanent protection of the surface.

Three simple steps: Clean, Dry, and Apply.

- Easily repels water, dirt, dust, and pollutants.
- This coating is permanent hydrophobic.
- Restores damaged finishes and reduces cleaning intervals.
- Resistant to all kinds of chemicals and UV radiation.
- Superior anti-pollution and anti-corrosion properties.
- This coating can withstand temperatures of 300°C.

Expected Life Duration up to 15 years+.



SI21

2-Component (2K)

Paint Strongest White

for glossy surfaces



How to use: Page 18

Product ID	: SI212000 64oz / 5.3 lbs
Consumption	: 3 layers 0.044lbs/ft ² - 0.56oz/ ft ² = 3 mil/120ft ²
Reachable area	: 2 layers 0.030lbs/ft ² - 0.37oz/ ft ² = 2 mil/160ft ² : 1 layer 0.014lbs/ft ² - 0.19oz/ ft ² = 1 mil/240ft ²
Hardness	: H8
Used for	: Fiberglass, steel, aluminium, plastics, wood
Application field	: Aviation, marine, exteriors, interiors

SI21 is a medium white 2-component paint that binds molecules and (conversion to ceramic) provides permanent protection on applied surfaces.

Three simple steps: Clean, Dry, and Apply.

- Easily repels water, dirt, dust, and pollutants.
- This coating does not absorb any water
- Resistant to all kinds of chemicals and UV radiation.
- This coating can withstand temperatures of 300°C

Expected Life Duration up to 12 year+.



How to use our Permant Coating System:

These products can be stored for up to 24 months (in a dry, temperature-stable dark environment)

Processing Temperature:
Ambient temperature: 41-86°F
Avoid direct sunlight, Rain and /or high humidity.

IMPORTANT:
Before you use a NANO-CERAMIC product, please make sure you wear suitable protection gear. We always recommend using a paint suit, respirator mask and latex or nitrile gloves.

Outfit/Applicators:



Application information

The SI11/SI21 coatings can be applied directly or indirectly on all surfaces (porous and non-porous) such as concrete, steel, wood, acrylic, gypsum, painted or unpainted surfaces, indoors, or outdoors. The surface underneath will be superbly protected against erosion and corrosion and will stay cleaner longer. Cleaning becomes quicker, easier, and less expensive, as special cleaning agents are unnecessary.

Preparation

Make sure the surface is free from any contamination and dirt. A zinc rich primer can be used in case of problems with the substrate. **Warning the surface must be completely dry before application and must stay dry for 6 hours after application after application!**

The 2-Component Permanent Coating System

Mix the can SI11B with the can of SI11A by pouring can B into can A, or measure exactly by net weight in a ratio of 7:3 and mix very well. Mix the can of SI21B with the can of SI21A by pouring can B into can A, or measure exactly by net weight in a ratio of 9:1 and mix thoroughly with a power agitator. Carefully pour the mixed contents into a professional paint sprayer, and spray in thin layers until the surface reaches your desired thickness.

Let the surface dry for 24 hours. It is touch-dry in 1 hours, after 4 hours, 85% cured, and the remaining 15% (transformation into ceramics) is fully cured after 7 days. Be aware that the mixed contents cannot be stored longer than 3 hours. The surface can simply be maintained with a high pressure washer at 80 bar using our biologically degradable Reactivating Shampoo.

Tool cleaning

The individual components, as well as the mixing system of the paint sprayer, can be diluted and cleaned using our THIN Thinner Solvent.

SOLV Thinner solvent

for all types of our ceramic paint & coating



Article Nr. : SOLV0400 14oz / 0.8 lbs

All our paints and coatings are ready to use, for certain spray applications, especially dark colors who require more than average color pigments, it may be necessary to use a little thinner solvent to achieve optimum flowability.



VIDEO



TEST (EN 1504-2)



Gyromixer

Tint your desired color



Dispencer

Color card

Other colors need minimal 100kg

Residential

SI13 White Egg-Shell (Flat Finish) 15/25 (20/60°)	SI41 Textured White Semi Gloss 41/69 (20/60°)
SI15 White Egg Shell (Flat Finish) 18/28 (20/60°)	SI42 Textured White Matte 11/21 (20/60°)
SI21 White Gloss 49/77 (20/60°)	
SI22 White Satin 33/59 (20/60°)	

Original
Cool white
RAL 9001
Cream white
RAL 9002
Grey white
RAL 9003
Signal white
RAL 9004
Signal black
RAL 9005
Jet black
RAL 9006
White aluminium
RAL 9007
Grey aluminium
RAL 9010
Pure white
RAL 9011
Graphite black
RAL 9016
Traffic white

RAL 9018
Papyrus white
RAL 9022
Pearl light grey
RAL 9023
Pearl dark grey
RAL 1000
Green beige
RAL 1001
Beige
RAL 1002
Sand yellow
RAL 1011
Brownbeige
RAL 1013
Pearl white
RAL 1014
Ivory
RAL 1015
Light Ivory
RAL 9017
Traffic black

RAL 3015
Light pink
RAL 6007
Pastel blue
RAL 4009
Pastell violet
RAL 6027
Light green
RAL 7000
Squirrel grey
RAL 1036
Pearl gold
RAL 8029
Pearl copper
RAL 4012
Pearl blackberry
RAL 6025
Pearl gentian blue
RAL 6036
Pearl opal green
RAL 8016
Mahogany braun

Wood

SI11 Transparent Gloss 51/78 (20/60°)
SI12 Transparent Matte 11/21 (20/60°)

SI11 Transparent
SI11 Light
SI11 Nut
SI11 Colonial

Industrial

SI11 Transparent Gloss 51/78 (20/60°)
SI21 White Gloss 49/77 (20/60°)
SI22 White Satin 33/59 (20/60°)

Transparent
RAL 1026
Lumious yellow
RAL 3020
Traffic red
RAL 9005
Jet black
RAL 1004
Golden yellow [Cat]
RAL 6002
Leaf green [J.D Deere]
RAL 7035
Light grey
RAL 7011
Dark grey
RAL 7003
Silver grey
RAL 8002
Signal brown
RAL 8025
Pale brown

Marine

SI12 Transparent Matte 11/21 (20/60°)
SI41 Textured White Semi Gloss 41/69 (20/60°)
SI42 Textured White Matte 11/21 (20/60°)

Military

SI31 Textured Transparent Semi Gloss 41/69 (20/60°)
SI33 Textured Black Semi Gloss 41/69 (20/60°)

Original
Cool white
RAL 9010
Pure white
RAL 9001
Cream white
RAL 9023
Distant blue
RAL 1023
Traffic yellow
RAL 7001
Silver gray
RAL 1015
Light Ivory
RAL 9016
Pure white
RAL 9001
Cream
RAL 1001
Beige
RAL 1020
Olive yellow

RAL 3000
Fire red
RAL 3004
Burgundy
RAL 7036
Platinum
RAL 9005
Jet Black
RAL 9019
Turquoise bleu
RAL 6027
Light green
RAL 9000
Violet blue
RAL 9012
Light blue
RAL 9002
Ultramarine blue
RAL 9013
Sapphire blue
RAL 5005
Signal blue

Transparent matte
Light stone
RAL 6031
Bronze green
RAL 6451
Brunswick green
RAL 7016
Dark sea grey
RAL 5008
[RAF] Blue grey

RAL 7031
Blue grey
RAL 9005
Jet black
RAL 6005
NATO green
RAL 7024
Graphite grey
RAL 1015
Desert sand
RAL 9000
Camo beige
RAL 9012
Dark grey camo
RAL 9002
Dark brown camo
RAL 6022
Olive drap
RAL 5005
Very dark drap

Antifouling

SI14 Color 3141 (20/60°)

Transparent
RAL 9005
Jet Black
RAL 3001
Signal Red
RAL 9002
Ultra marine blue
RAL 7004
Signal Grey

Sample Kits, Test, Touch and Feel

Sales Demo Kit
 Coated Substrates
 SI110500 (2K)
 SI150500 (1K)
 16oz



DEMOPKIT

Test Kit
 SI130250 (2K)
 SI410250 (2K)
 SI210250 (2K)
 SI310250 (2K)
 SI330250 (2K)
 SI110250 - LY (2K)
 8.5oz



DEMOTKIT

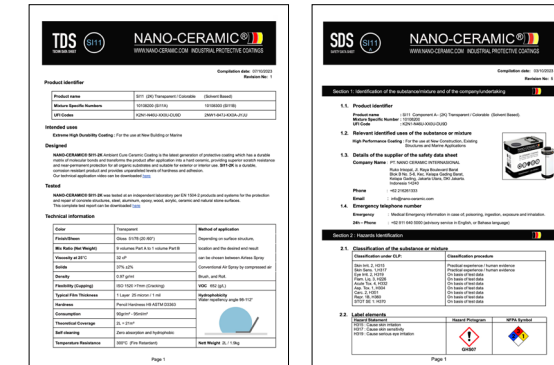
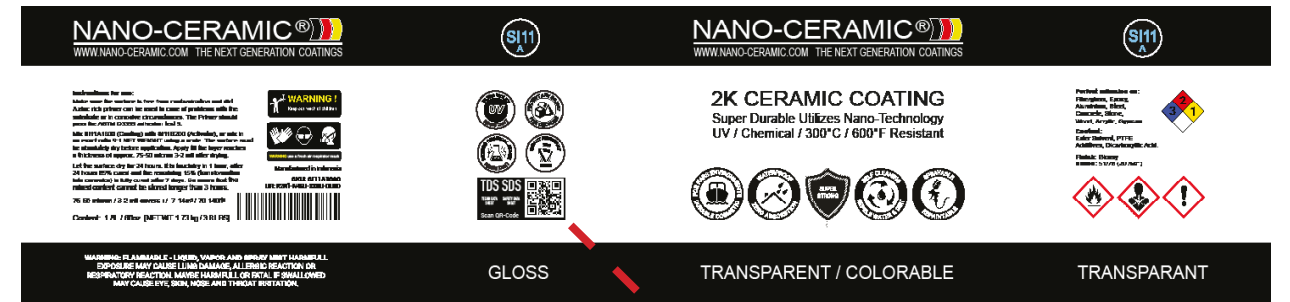
Substrate Kit
 16 different coating and paints



DEMOSKIT

All our products are produced according to EU/ECHA USA/OSHA/EPA CANADA/WHIMS regulations

Scan QR Code for TDS and SDS



NANO-CERAMIC®

WWW.NANO-CERAMIC.COM INDUSTRIAL PROTECTIVE COATINGS



The Leader in Durability

Did you know?

That our coatings are made of pure silica sand, which is the most common element on Earth?

Dealer