

# NANO-CERAMIC®

[WWW.NANO-CERAMIC.COM](http://WWW.NANO-CERAMIC.COM) INDUSTRIAL PROTECTIVE COATINGS



**Military/Navy** Permanent Coating Systems

## What makes NANO-CERAMIC Permanent Coating System so durable?

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

NANO-CERAMIC permanent coating system is 300°C resistant and more than 4 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.

## Zero Maintenance for decades to come!

Our NANO-CERAMIC permanent coating is (non PFAS) 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 System be applied on any surface?

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



## Is NANO-CERAMIC Permanent Coating System self-cleaning?

NANO-CERAMIC permanent coating system 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 system is resistant to water vapor and water absorption.

## Can our hydrophobic coatings increase acceleration time and speed while simultaneously reducing fuel consumption?

Yes, the superhydrophobic surface has a good drag reduction effect, and the maximum drag reduction rate is up to 23.4%.

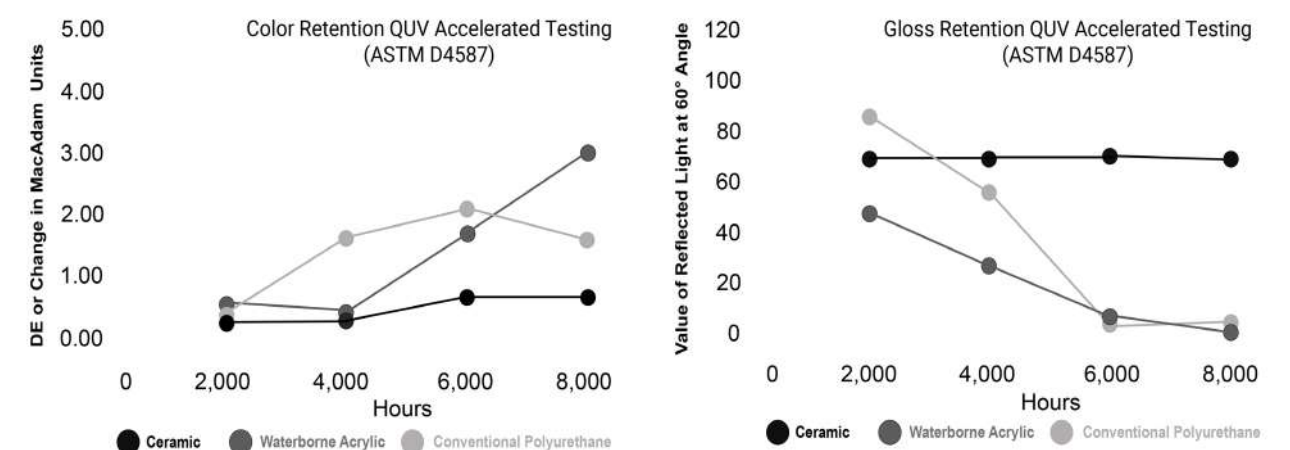
In a new analysis from IPTEK ITS 2023 concerning Drag Reduction, the following conclusions have been obtained. It was found that there was an increase in acceleration due to drag reduction on the ship model treated with a superhydrophobic coating, showing a 31% improvement compared to the non-coated surface and a 27% improvement compared to a conventionally anti-fouling coated surface.

As published in the International Journal of Marine Engineering Innovation and Research. Click [here](#) for the IPTEK analyses.

## Other paints are simply not suitable for longterm harsh outdoor environments.

In order to avoid poorly maintained properties (concrete rot, chipped and weathered paint, etc) for the next decades, our Permanent Coating System is simply the best solution to keep the value of your investment in place.

## Superior in Color & Gloss Retention





# A special selection of high grade tinting chemicals computerized dispersed in a superior ceramic resin.

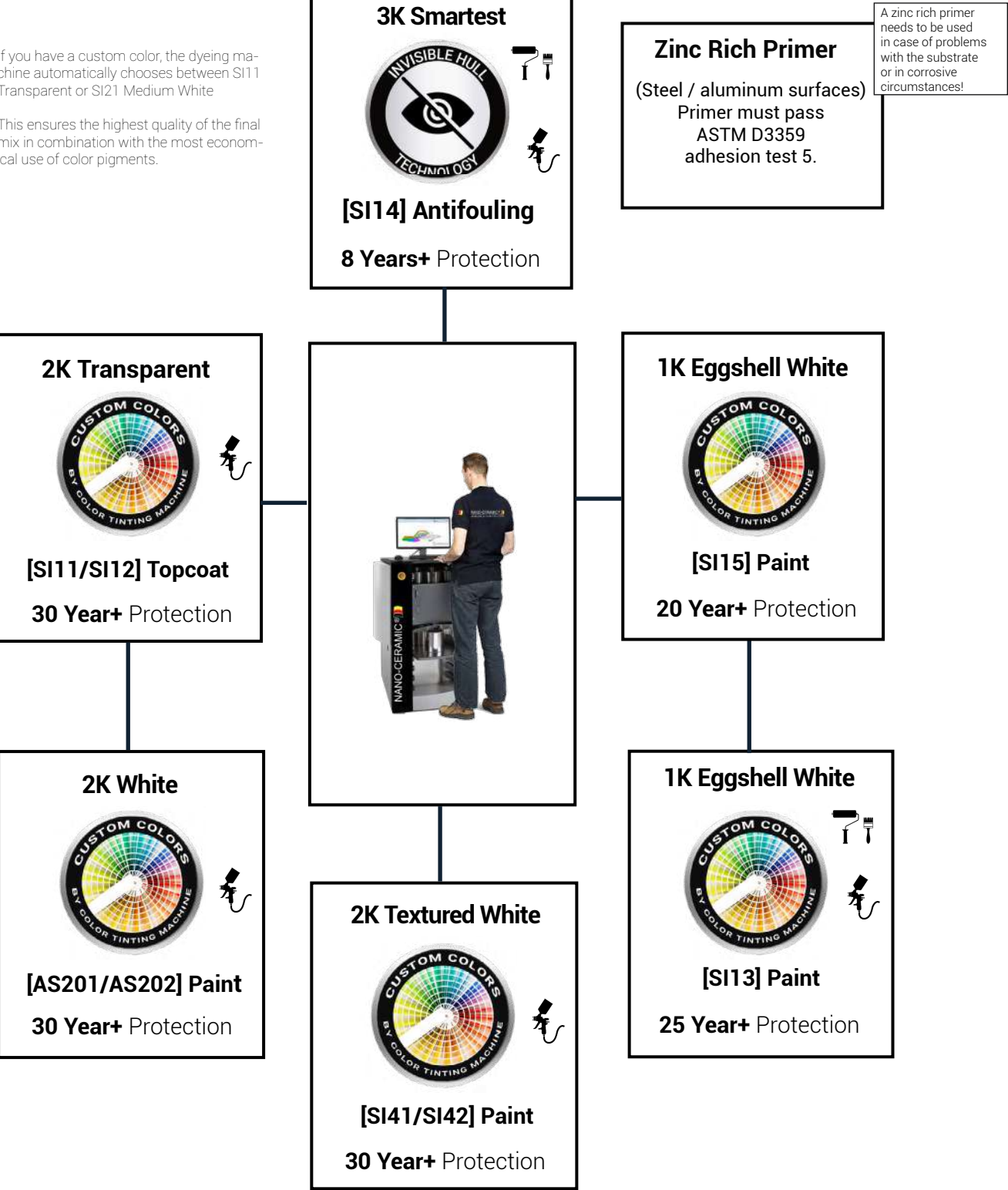
Conventional gelcoats are a mixture with Epoxy or Polyurethane resins, of which the quality of resin and pigments are the most important factor in the ultimate strength. Most have a lifespan of 15 years, with hardness, color and gloss retention (sun fading) and manual mixing towards consistent quality being the most common problems in keeping the desired object at an aesthetically pleasing level.

## Quality Comparison of paints technologies

In case written in bold font it means existing shortcomings in quality.

Characteristics	Acrylic Latex walls ceilings	Acrylic walls floors	Epoxy floors	Polyurethane waterproofing	CERAMIC® all surfaces
Primer	Yes	Yes	Yes	Yes	No
Adhesion Strength	Poor	Poor	Poor	Poor	Excellent
Cross Cut Test	Poor	Poor	Good	Poor	Excellent
Abrasion Resistance	Poor	Poor	Average	Poor	Excellent
UV Radiation Resistance	Average	Average	Poor	Good	Excellent
Artificial Atmospheric Agents	Poor	Poor	Good	Good	Excellent
Colour Retention	Average	Average	Poor	Poor	Excellent
Gloss Retention	Poor	Poor	Poor	Poor	Excellent
Chemical Resistance	Good	Good	Good	Poor	Excellent
Severe Chemical Attack	Poor	Poor	Average	Poor	Excellent
Temperature Resistance	60°C	91°C	177°C	263°C	300°C
Thermal Shock Resistance	Good	Good	Poor	Good	Excellent
Carbon Dioxide Permeability	Poor	Poor	Good	Poor	Excellent
Permeability water vapour	Average	Average	Good	Average	Excellent
Water Absorption Rate	5-15%	1%	2%	3%	0%
Aging at 70°C	Poor	Poor	Good	Average	Excellent
Adhesion Strenght Pull-off	Poor	Average	Good	Poor	Excellent
Impact Resistance	Poor	Average	Good	Poor	Excellent
Anti-Graffiti	No	No	No	No	Yes
Anti-Termite (Wood)	No	No	No	No	Yes
Hydrophobic Self Cleaning	No	No	No	No	Yes
Easy to Clean	No	No	No	No	Yes
Total Solar Reflectance (TSR)	60 (white)	60 (white)	60 (white)	60 (white)	88 (white)
Expected Lifetime in Years	<7	<7	<5-15	<5-15	15-30+

# Ceramic Coating & Paint System



# SI11/SI12 2-Component (2K)

## Topcoat Transparent for glossy or matte surfaces

<b>Article Nr</b>	: SI112000 2 L / 1.900 g Transparent Gloss SI122000 2 L / 2.000 g Transparent Matte
<b>Consumption</b>	: 3 layers +/- 270 g/m <sup>2</sup> - 285 ml/m <sup>2</sup> 75 micron = 7 m <sup>2</sup>
<b>Reachable area</b>	: 2 layers +/- 180 g/m <sup>2</sup> - 190 ml/m <sup>2</sup> 50 micron = 14 m <sup>2</sup> : 1 layers +/- 90 g/m <sup>2</sup> - 95 ml/m <sup>2</sup> 25 micron = 21 m <sup>2</sup>
<b>Hardness</b>	: H9
<b>Used for</b>	: The system 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.
<b>Application area</b>	: Buildings, airports, offshore structures, bridges, tunnels, hotels, private housing, etc.



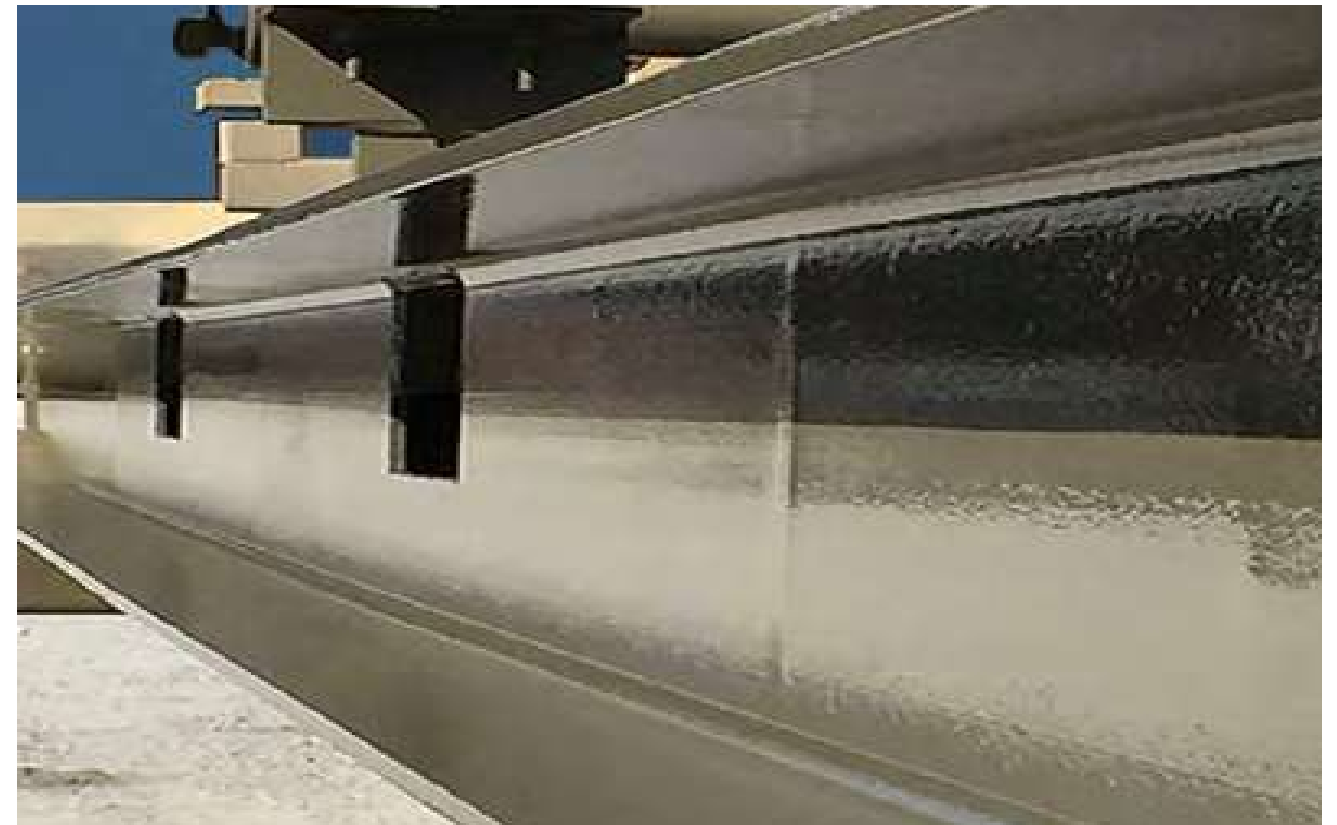
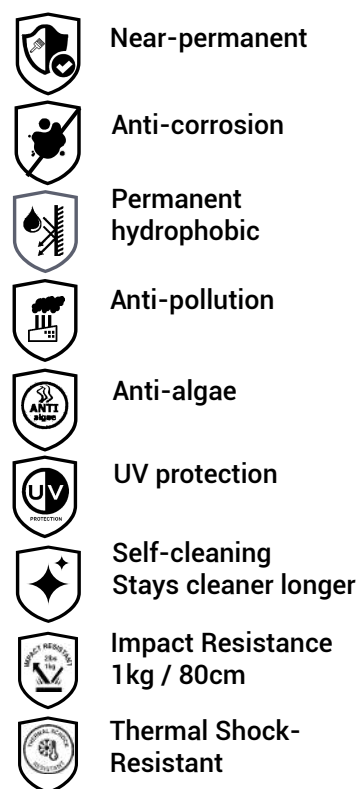
How to use: Page 38

SI11/SI12 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. suitable for making walls fire retardant and is most best solution to make rooftops waterproof

Expected life duration up to 30 years+.



## Permanent Hydrophobic - Self Cleaning





# SI21/SI22 2-Component (2K)

## Paint Strongest White for glossy and satin surfaces

<b>Article Nr</b>	: SI210000 2 L / 2.400 g SI220000 2 L / 2.500 g
<b>Consumption</b>	: 3 layers +/- 200 gr/m <sup>2</sup> - 165 ml/m <sup>2</sup> 90 micron = 12m <sup>2</sup>
<b>Reachable area</b>	: 2 layers +/- 130 gr/m <sup>2</sup> - 110 ml/m <sup>2</sup> 60 micron = 16m <sup>2</sup> : 1 layer +/- 65 gr/m <sup>2</sup> - 55 ml/m <sup>2</sup> 30 micron = 24m <sup>2</sup>
<b>Hardness</b>	: H9
<b>Used for</b>	: The SI21 system 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
<b>Application area</b>	: Buildings, airports, offshore structures, bridges, tunnels, ships, tanks, vehicles, etc.



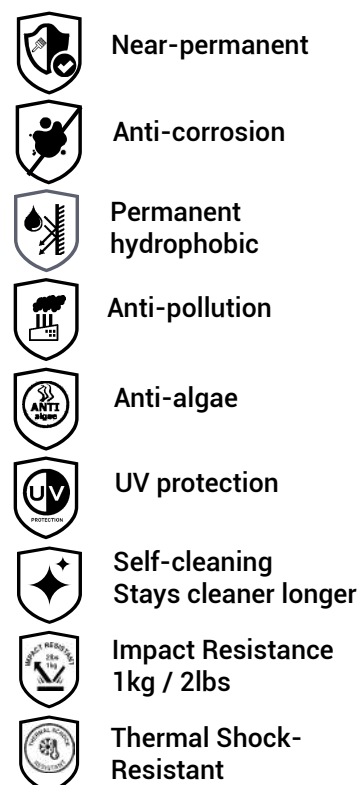
How to use: Page 38

SI21/SI22 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 suitable for making walls fire retardant and to make rooftops waterproof

Expected life duration up to 30 years+



## Thermal Shock - Impact Resistant





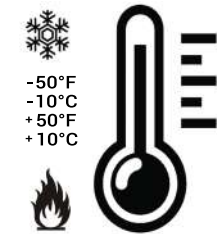
# SI31 2-Component (2K)

## Textured Transparent Semi Gloss antislip - high impact resistant



Article Nr	: SI312000 2 L / 2.000 g
Consumption	: 3 layers +/- 222 g/m² - 222 ml/m² 90 micron = 9 m²
Reachable area	: 2 layers +/- 111 g/m² - 111 ml/m² 60 micron = 18 m²
	: 1 layer +/- 74 g/m² - 74 ml/m² 30 micron = 27 m²
Hardness	: H9
Used on	: Gelcoat, fiberglass, steel, aluminium, : plastics, wood, virtually any surface.
Application area	: Buildings, marine, offshore structures, bridges, etc

How to use: Page 38



How to use: Page 31

SI31 is a clear solvent-based ceramic coating, linked with a ceramic activator, available in semi-gloss and includes sprayable nano particles.

Known for its exceptional durability, this coating easily applies to any organic surface without needing a primer. Its textured design makes it perfect for anti-slip needs.

- Easily repels water, dirt, dust, and pollutants.
- This coating has an outstanding hydrophobic effect.
- Resistant to all kinds of chemicals and UV radiation.
- This coating can withstand temperatures of 300°C.
- Zero absorbtion, waterproof, insulation and heat rejecting

-  Easy to apply  
Repaintable
-  Cut maintenance
-  Anti-water spot  
Anti-corrosion
-  Permanent hydrophobic
-  Self-cleaning  
stays cleaner longer
-  Anti-scratch
-  Visibility safety
-  Protects your investment
-  Impact Resistance  
1kg / 80cm
-  Safes 10-20% on electricty

Expected life duration up to 30 years+



## Anti Slip - Noice Reduction





# SI14

3-Component (3K)

## The Smartest Antifouling black/red/blue/grey



<b>Article Nr</b>	: SI144000-BK SI144000-RD 4 L / 4.300 g : SI144000-BL SI144000-GR 4 L / 4.300 g
<b>Consumption</b>	: 2 layers 308 g/m <sup>2</sup> - 286 ml/m <sup>2</sup> = 200 micron / 14 m <sup>2</sup>
<b>Reachable area</b>	: 1 layers 154 g/m <sup>2</sup> - 143 ml/m <sup>2</sup> = 100 micron / 28 m <sup>2</sup>
<b>Hardness</b>	: H7
<b>Used for</b>	: Gelcoat, fiberglass, steel, aluminium, plastics, wood
<b>Application area</b>	: Marine Antifouling (humid environments)

How to use: Page 38

SI14 is a super strong strong and sleek 3-component antifouling system which forms a durable matrix of molecular bonds (transformation to ceramic) resulting in a superior protection of the surface.

The coating tricks microorganisms into perceiving plain water in front of them, rather than a ship's hull; as a result they often make no attempt to settle on the hull.

Due to a combination of hydrophobic silicone and hydrophilic polymers they can not longer clearly recognize the surface, nor distinguish the hull unambiguously from sea water.

Three simple steps: Clean, Dry, and Apply.

- Easily releases algae
- Super smooth self-polishing surface
- Organic Copper and Tin Non Biocidal release
- This coating has an outstanding hydrophobic effect.
- Resistant to all kinds of chemicals and UV radiation.
- This coating can withstand temperatures of 300°C

Expected life duration up to 8 year+



**Easy to apply**  
**Repaintable**



**Cut maintenance costs**



**Organic Copper and Tin**  
**Non Biocidal**



**Super Sleek Surface**  
**Algae release <6knots**



**Permanent**  
**hydrophobic**



**Self-cleaning**  
**stays cleaner longer**



**Save fuel**



**Impact Resistance**  
**1kg / 2lbs**



**Thermal Shock-**  
**Resistant**



## Super Smooth - Saves Fuel





# SI13

2-Component (2K)

## Paint Coolest White for egg-shell surfaces



**Article Nr** : SI132000 2 L / 3.300 g White

**How to use:** Page 38

**Consumption** : 2 layers +/- 235 g/m<sup>2</sup> - 143 ml/m<sup>2</sup> 90 micron = 14 m<sup>2</sup>

**Reachable area** : 1 layer +/- 118 g/m<sup>2</sup> - 72 ml/m<sup>2</sup> 45 micron = 28 m<sup>2</sup>

**Hardness** : H7

**Used for** : The SI13 system can be applied directly or indirectly on all surfaces (porous and non-porous) such as concrete, steel, wood, acrylic, gypsum, painted or unpainted surfaces, walls, ceilings indoors, or outdoors

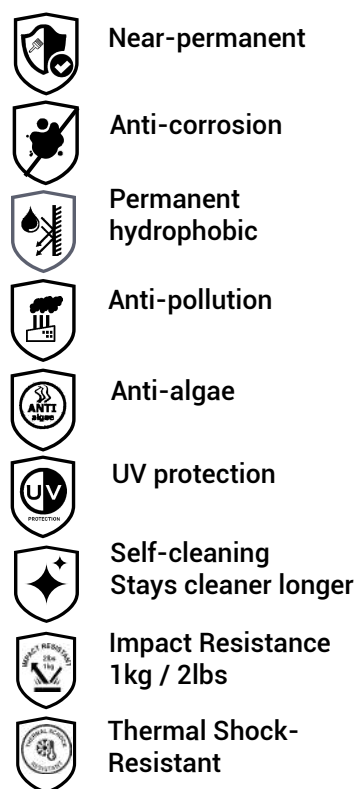
**Application area** : Buildings, offices airports, offshore structures, bridges, tunnels, hotels, private housing, etc.

SI13 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 has an outstanding hydrophobic effect.
- 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 suitable for making walls fire retardant and to make rooftops waterproof.

Expected life duration up to 25 year+



## Passive Cooling - Isolating





# SI15

1-Component (1K)

## Paint Coolest White for egg-shell surfaces



- Article Nr** : SI152000 2 L / 3.000 g White
- Consumption** : 2 layers +/- 235 g/m<sup>2</sup> - 143 ml/m<sup>2</sup> 90 micron = 14 m<sup>2</sup>
- Reachable area** : 1 layer +/- 118 g/m<sup>2</sup> - 72 ml/m<sup>2</sup> 45 micron = 28 m<sup>2</sup>
- Hardness** : H6
- Used for** : The SI15 system can be applied directly or indirectly on all surfaces (porous and non-porous) such as concrete, steel, wood, acrylic, gypsum, painted or unpainted surfaces, walls, ceilings indoors, or outdoors
- Application area** : Buildings, offices airports, offshore structures, bridges, tunnels, hotels, private housing, etc.










How to use: Page 38

SI15 is an incredibly strong 1-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 has an outstanding hydrophobic effect.
- 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 suitable for making walls fire retardant and to make rooftops waterproof

Expected life duration up to 20 years+

-  Near-permanent
-  Anti-corrosion
-  Permanent hydrophobic
-  Anti-pollution
-  Anti-termite
-  Anti-algae
-  UV protection
-  Self-cleaning  
Stays cleaner longer
-  Thermal Shock-Resistant



## Chemical - Temperature Resistant (300°C)





# Color mixing has never been so easy!!!

X- SMART is the modular version of the acclaimed dispenser series, extremely cost-effective and easy to operate, with a low maintenance

This color mixer has a robust and tubeless design, built with a patented pump technology (to reduce waste) and identical features, making it a highly advanced dispenser, ideally suited to reduced capacity.



Prisma-RT is a cloud-based innovative mobile color application compatible with the X-SMART dispenser. It brings the best of wireless technology without the associated investment costs in hardware. Customers do not have to provide computers and other accessories or set up servers, eliminating the need for complicated and time-consuming installation and configuration. This smart Prisma-RT device helps to fix prices and taxes and can print labels via Wi-Fi.



X-SMART  
Stabilizer plates

# 16 High Grade Coloring chemicals



**Titanium White**  
Masstone   
Tint   
844-0061 4 L



**Quinacridone Red**  
Masstone   
Tint   
844-0451 1 L



**Scarlet Red**  
Masstone   
Tint   
844-0526 1 L



**Lead Free Orange**  
Masstone   
Tint   
844-0982 1 L



**Trans Red Oxide**  
Masstone   
Tint   
844-1054 1 L



**Red Oxide**  
Masstone   
Tint   
844-1063 1 L



**Burnt Umber**  
Masstone   
Tint   
844-1352 1 L



**Trans Yellow Oxide**  
Masstone   
Tint   
844-1852 1 L



**Yellow Oxide**  
Masstone   
Tint   
844-1863 1 L



**Lead Free Med Yellow**  
Masstone   
Tint   
844-2555 1 L



**Yellow**  
Masstone   
Tint   
844-2826 1 L



**Organic Yellow**  
Masstone   
Tint   
844-2852 1 L



**PHTHALO Green**  
Masstone   
Tint   
844-5558 1 L



**Quinacridone Violet**  
Masstone   
Tint   
844-9451 1 L



**Lamp Black**  
Masstone   
Tint   
844-9955 1 L



**PHTHALO BLUE**  
Masstone   
Tint   
844-7262 1 L



Color card

Residential

SI13 White Egg-Shell (Flat Finish) 15/25 (20/60°)

SI15 White Egg Shell (Flat Finish) 18/28 (20/60°)

SI21 White Gloss 49/77 (20/60°)

SI22 White Satin 33/59 (20/60°)

SI41 Textured White Semi Gloss 41/69 (20/60°)

SI42 Textured White Matte 11/21 (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 5007

Pastel blue

RAL 4009

Pastell violet

RAL 6027

Light green

RAL 7000

Squidrel grey

RAL 1036

Pearl gold

RAL 8029

Pearl copper

RAL 6012

Pearl blackberry

RAL 5025

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 7001

Silver grey

RAL 8032

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°)

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

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

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

Fire red

Burgundy

Platinum

Jet Black

Turquoise bleu

Light green

Violet blue

Light blue

Ultramarine blue

Sapphire blue

Signal blue

Transparent matte

Blue grey

Jet black

NATO green

Graphite grey

Desert sand

Camo beige

Dark grey camo

Dark brown camo

Olive drap

Very dark drap

Light stone

RAL 6031

Bronze green

RAL 6451

Brunswick green

RAL 7016

Dark sea grey

RAL 5008

[RAF] Blue grey

Antifouling

SI14 Color 31/41 (20/60°)

Transparent

RAL 9005

Jet Black

RAL 3001

Signal Red

RAL 5002

Ultra marine blue

RAL 7004

Signal Grey



## What is NANO-CERAMIC UVA Topcoat?

NANO-CERAMIC® UVA Topcoat is a revolutionary low-VOC, non-PFAS, self-leveling protective coating system that forms an ultra-hard, glass-like hydrophobic barrier—ideal for high-performance marine environments.

Specifically engineered for extreme durability and a sleek, high-gloss finish, UVA Topcoat delivers exceptional resistance to saltwater, intense UV exposure, biofouling, and harsh marine chemicals like hydrofluoric acid (HF), hydrochloric acid, and citric acid—all while remaining completely safe and compliant for onboard use (Food contact safe).

Powered by advanced nanotechnology, UVA Topcoat extends the lifespan of marine surfaces by protecting polyester, epoxy, polyurethane, and acrylic resins steel, aluminum, composites, and wood from corrosion, surface breakdown, and environmental wear. —making it an exceptionally versatile solution for virtually any surface.

## Why UVA Topcoat is a Game-Changer in Marine Protection?

For decades, protective coatings like epoxy, polyurethane (PU), and acrylic have been the industry standard. However, they all share a critical weakness—UV degradation. Prolonged exposure to sunlight causes these coatings to yellow, crack, and deteriorate, leading to costly maintenance and premature failures.

## Where can UVA Topcoat be applied in Marine use?

UVA Topcoat is highly versatile and suitable for a wide range of marine applications:

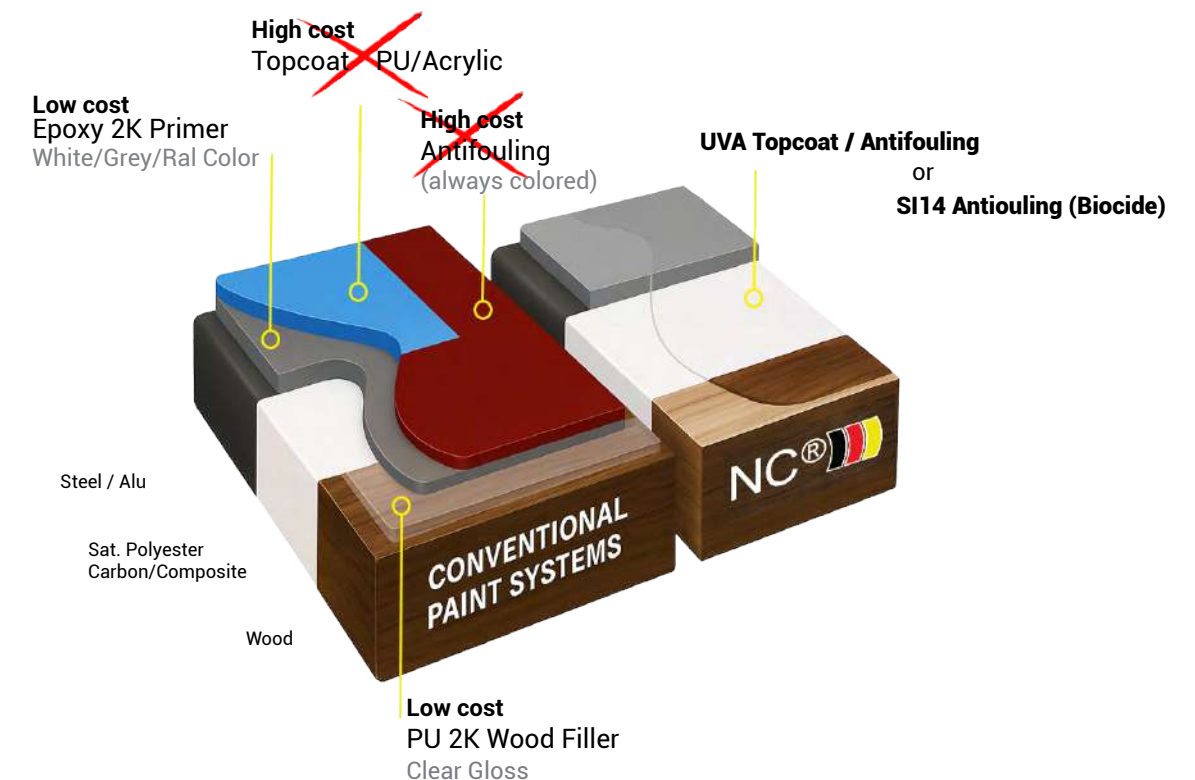
- Yachts & Boats – Hulls, decks, topsides, and superstructures
- Speedboats – UV protection and ultra-slick finish for high-performance watercraft
- Marine Infrastructure – Docks, piers, pontoons, and submerged structures
- Ship Interiors – Tables, countertops, cabins, walls, and decorative panels
- Commercial Vessels – Outer hulls, ballast tanks, walkways, and engine rooms
- Antifouling Protection – Ideal for vessels in constant motion or those stored on land

Compatible with both new builds and retrofits, UVA Topcoat adapts to various marine substrates and operating conditions with ease.

## Can our hydrophobic coatings boost speed and cut fuel use?

Yes—our superhydrophobic sleek surface reduces drag by up to 23.4%, leading to 31% faster acceleration compared to uncoated surfaces and 27% faster than conventional antifouling coatings (Source: IPTEK ITS, 2023).

## How it Works



## Superior Performance at the Lowest Cost.

UVA Topcoat isn't just another coating—it's a next-generation solution that replaces complex and expensive multi-layer systems with a single, high-performance layer.

By applying directly over low-cost primers, UVA Topcoat eliminates the need for expensive finishing coats. Its smart chemistry and simplified process make traditional topcoat systems outdated by comparison.

Whether for industrial, marine, infrastructure, or decorative use, UVA Topcoat simplifies your process and multiplies your value—proving that true performance doesn't have to come at a high price.

Freedom in Protection Years

Long-Lasting Protection, Layer by Layer  
A single 6 µm (micron) layer applied using HVLP spray technology can provide up to 8 years of protection. Need more durability? Just add more layers—it's that simple.

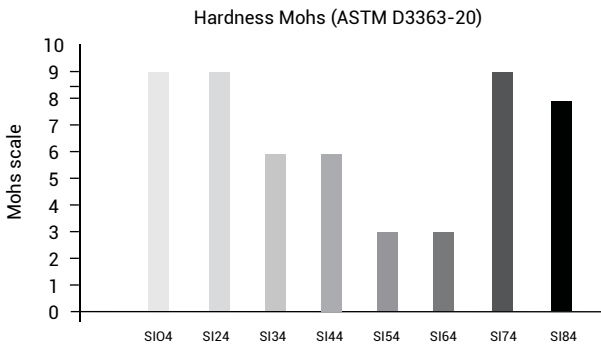
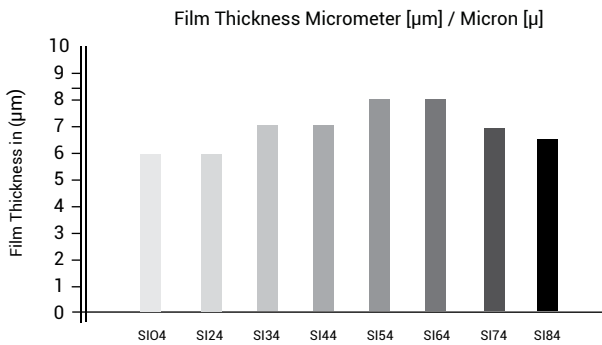
Apply wet-on-wet: once the first coat flashes off (dry to the touch but still tacky), you can immediately apply the next. This method prevents trapped gases and creates a seamless, chemical-resistant film with hydrophobic properties—making surfaces easier to clean and maintain.

Coverage & Application Efficiency

UVA Topcoat is engineered for maximum efficiency with minimal material use—delivering high-performance protection at a fraction of the volume required by traditional coatings.  
Recommended usage is approximately ±12.5 g/m² per layer (by wipe or spray), resulting in a film thickness of around 6 microns, with one liter covering up to 80 m².

Color Tinting Option for Marine Applications

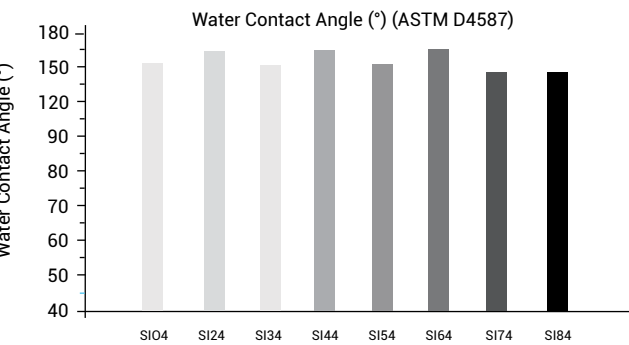
For customized aesthetics, UVA Topcoat can be tinted using our colorants on page 22-23. These high-performance, solvent-free pigments provide long-lasting color stability and UV resistance—perfect for marine environments where both protection and appearance matter. Ideal for yachts, decks, interiors, or any visible surface requiring a durable, colored finish without compromising the coating's hydrophobic and chemical-resistant properties.



Quality Comparison of paints technologies

In case written in bold font it means existing shortcomings in quality.

Characteristics	Acrylic Latex walls ceilings	Acrylic walls floors	Epoxy floors	Polyurethane waterproofing	UVA Topc all surfaces
Primer	Yes	Yes	Yes	Yes	No
Adhesion Strength	Poor	Poor	Poor	Poor	Excellent
Cross Cut Test	Poor	Poor	Good	Poor	Excellent
Abrasion Resistance	Poor	Poor	Average	Poor	Excellent
UV Radiation Resistance	Average	Average	Poor	Good	Excellent
Artificial Atmospheric Agents	Poor	Poor	Good	Good	Excellent
Colour Retention	Average	Average	Poor	Poor	Excellent
Gloss Retention	Poor	Poor	Poor	Poor	Excellent
Chemical Resistance	Good	Good	Good	Poor	Excellent
Severe Chemical Attack	Poor	Poor	Average	Poor	Excellent
Temperature Resistance	60°C	91°C	177°C	263°C	300°C
Thermal Shock Resistance	Good	Good	Poor	Good	Excellent
Carbon Dioxide Permeability	Poor	Poor	Good	Poor	Excellent
Permeability water vapour	Average	Average	Good	Average	Excellent
Water Absorption Rate	5-15%	1%	2%	3%	0%
Aging at 70°C	Poor	Poor	Good	Average	Excellent
Adhesion Strenght Pull-off	Poor	Average	Good	Poor	Excellent
Impact Resistance	Poor	Average	Good	Poor	Excellent
Anti-Graffiti	No	No	No	No	Yes
Anti-Termite (Wood)	No	No	No	No	Yes
Hydrophobic Self Cleaning	No	No	No	No	Yes
Easy to Clean	No	No	No	No	Yes
Total Solar Reflectance (TSR)	60 (white)	60 (white)	60 (white)	60 (white)	88 (white)
Expected Lifetime in Years	<7	<7	<5-15	<5-15	8/16/24





# SIO4

1-Component (1K)

## H9 UVA Topcoat Transparent for glossy surfaces

**Article Nr** : SIO41LUVA 1L / 920 g SIO405UVA 500 ml / 460 g  
**Consumption** : 3 layers +/- 34.6 g/m<sup>2</sup> - 37.5 ml/m<sup>2</sup> 18 micron = 20 m<sup>2</sup>  
**Reachable area** : 2 layers +/- 23.0 g/m<sup>2</sup> - 25.0 ml/m<sup>2</sup> 12 micron = 40 m<sup>2</sup>  
 : 1 layer +/- 11.5 g/m<sup>2</sup> - 12.5 ml/m<sup>2</sup> 6 micron = 80 m<sup>2</sup>  
**Hardness/Cupping** : H9 / Flexibility ISO 1520 >21mm  
**Used for** : Fiberglass, steel, aluminium, plastics, wood  
**Application field** : Marine, exteriors, antifouling, interiors

SIO4 is an incredibly strong 1-component high performance coating and 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
- On the ship's hull, for higher speed and lower fuel use.
- 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
- Superb adhesion even on glass or stainless steel.
- Can be sprayed multilayered.
- Transparent, Opaque, solid-color or vibrant, transparent color finishes.

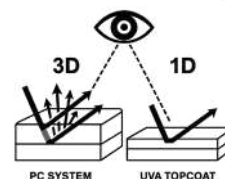
Expected life duration 8-16 or 24 Years (layer thickness)



How to use: Page 39



How does it look visually?



Save fuel  
Higher speeds



Near-permanent



Anti-corrosion



Permanent  
hydrophobic



Anti-pollution



Anti-algae



UV protection



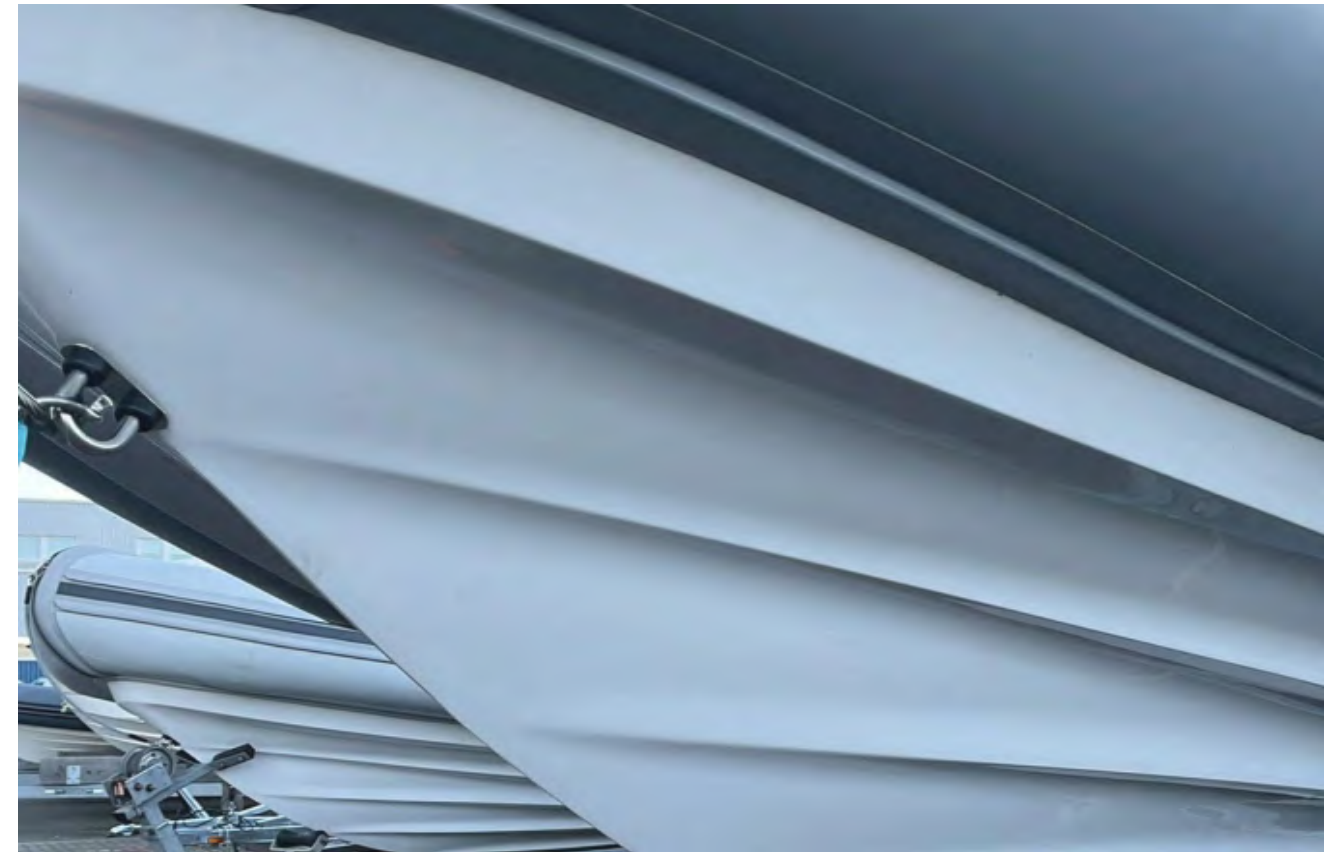
Self-cleaning  
Stays cleaner longer



Impact Resistance  
1kg / 80cm



Thermal Shock-  
Resistant



## Higher Speeds - Fuel Saving





# SI24

1-Component (1K)

## H9 UVA Topcoat Transparent for matte surfaces

**Article Nr** : SI241LUVA 1L / 920 g SI2405UVA 500 ml / 460 g  
**Consumption** : 3 layers +/- 34.6 g/m<sup>2</sup> - 37.5 ml/m<sup>2</sup> 18 micron = 20 m<sup>2</sup>  
**Reachable area** : 2 layers +/- 23.0 g/m<sup>2</sup> - 25.0 ml/m<sup>2</sup> 12 micron = 40 m<sup>2</sup>  
 : 1 layer +/- 11.5 g/m<sup>2</sup> - 12.5 ml/m<sup>2</sup> 6 micron = 80 m<sup>2</sup>  
**Hardness/Cupping** : H9 / Flexibility ISO 1520 >21mm  
**Used for** : Fiberglass, steel, aluminium, plastics, wood  
**Application field** : Marine, exteriors, antifouling, interiors

SiO<sub>4</sub> is an incredibly strong 1-component high performance coating and 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
- On the ship's hull, for higher speed and lower fuel use.
- 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
- Superb adhesion even on glass or stainless steel.
- Can be sprayed multilayered.
- Transparent, Opaque, solid-color or vibrant, transparent color finishes.

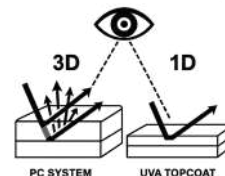
Expected life duration 8-16 or 24 Years (layer thickness)



How to use: Page 39



How does it look visually?



Save fuel  
Higher speeds



Near-permanent



Anti-corrosion



Permanent  
hydrophobic



Anti-pollution



Anti-algae



UV protection



Self-cleaning  
Stays cleaner longer



Impact Resistance  
1kg / 80cm



Thermal Shock-  
Resistant



## Anti Scratch - UV Resistant





# Marine-Grade Color Protection — Super Transparent

For boats where weight, speed, and durability matter, our advanced hybrid coating system offers a breakthrough: vibrant transparent tints or metallic finishes without sacrificing performance. By blending NANO-CERAMIC® Super Transparent Colorants into our UVA Topcoat, you get:

- Ultra-thin coating (<15 microns) = minimal weight
- H9 surface hardness = max scratch resistance
- Hydrophobic & anti-fouling = fast cleaning, less drag
- UV & salt resistant = marine-grade longevity
- Clear or colored: keep visibility through glass or plexi
- Optional metallic effect for custom marine finishes

Perfect for:

- Plexiglass hatches & windscreens
- Cabin glass, partitions, skylights
- Carbon fiber panels & consoles
- Stainless/aluminum trims & detailing



TRANSOXIDE RED A-G 130  
Masstone  
Tint  
77491-1 100 ml



TR.OXIDE YELLOW A-2R 130  
Masstone  
Tint  
77492-1 100ml



YELLOW A-N4G 100-ST  
Masstone  
Tint  
279376 100 ml



RED A-P2Y 100-ST  
Masstone  
Tint  
289404 100 ml



PINK A-EB 100-ST  
Masstone  
Tint  
287516 100 ml



BLUE A-BTR 100-ST  
Masstone  
Tint  
290247 100 ml



BLUE A-BTG 100-ST  
Masstone  
Tint  
275536 100 ml



GREEN A-GBX 100-ST  
Masstone  
Tint  
323291 100 ml



BLACK A-NB 100-ST  
Masstone  
Tint  
289518 100 ml



BLACK A-NY 100-ST  
Masstone  
Tint  
272060 100 ml

# Lightweight, Ultra-Hard, Built for Speed. Opaque Ral

This coating system enhances both performance and aesthetics — making boats faster, cleaner, and more refined.



YELLOW A-F2G 100  
Masstone  
Tint  
11785 100 ml



YELLOW A-H3G 100  
Masstone  
Tint  
11781 100 ml



YELLOW A-HRD 100  
Masstone  
Tint  
21108 100 ml



ORANGE A-HLD 100  
Masstone  
Tint  
11780 100 ml



RED A-D3GD 130  
Masstone  
Tint  
56110 100 ml



PINK A-E 130  
Masstone  
Tint  
73915 100 ml



RED VIOLET A-ER 130  
Masstone  
Tint  
73900 100 ml



VIOLET A-RL 100  
Masstone  
Tint  
51319 100 ml



BLUE A-BG 100  
Masstone  
Tint  
74160 100 ml



GREEN A-GNX 130  
Masstone  
Tint  
74260 100 ml



BLACK A-N 100  
Masstone  
Tint  
77266 100 ml



OXIDE YELLOW A-BV 100  
Masstone  
Tint  
771740 100 ml



OXIDE YELLOW A-CR 100  
Masstone  
Tint  
77310 100 ml



OXIDE YELLOW A-R 100  
Masstone  
Tint  
77492 100 ml



OXIDE RED A-B 100  
Masstone  
Tint  
77491 100 ml



WHITE A-R 100  
Masstone  
Tint  
77891 100 ml

# SIX1

2-Component (2K)

## Primer Epoxy Polyamide

heavy duty - anti-corrosion



**Article Nr** : SIX11250-WH/GR 1.25 L / 1.45 kg SIX15000=WH-GR 5 L / 5.8 kg

**Consumption** : 2 layers +/- 240 g/m<sup>2</sup> - 250 ml/m<sup>2</sup> 80 micron = 5 m<sup>2</sup>

**Reachable area** : 1 layer +/- 120 g/m<sup>2</sup> - 125 ml/m<sup>2</sup> 40 micron = 10 m<sup>2</sup>

**Hardness** : H5

**Colors** : White, Grey or RAL (RAL Minimum Order 250 pcs 5 L)

**Used on** : Concrete, Steel, Aluminium, Fiberglass and other organic surfaces

**Application area** : Buildings, marine, airports, offshore structures, bridges



**Fast Repaintable**



**Excellent adhesion**

SIX1 is a solvent based epoxy polyamide primer. This primer is used for corrosion protection on concrete, stainless, galvanized, carbon and alloy steel, aluminum in corrosive conditions and has excellent adhesion to all organic substrates and to all of our ceramic topcoats. The primer can be applied at a relative humidity of 40-80% and can be painted over within 8 hours 30°C, 1 hours 60°.

# SIX2

2-Component (2K)

## Primer Surfacer Acrylic Alkyd

smooth - surface modifier



**Article Nr** : SIX21250-WH/GR 1.25 L / 1.45 kg SIX25000-WH/GR 5 L / 5.8 kg

**Consumption** : 2 layers +/- 200 g/m<sup>2</sup> - 210 ml/m<sup>2</sup> 60 micron = 6 m<sup>2</sup>

**Reachable area** : 1 layer +/- 100 g/m<sup>2</sup> - 105 ml/m<sup>2</sup> 30 micron = 12 m<sup>2</sup>

**Hardness** : H3

**Colors** : White, Grey

**Used on** : Steel, aluminium, wood, fiberglass, and old paint systems.

**Application area** : Buildings, hotels, private housing, etc.



**Fast Repaintable**



**Excellent adhesion**

SIX2 High-quality 2K surfacer (two-component basecoat) for auto-refinish, marine, and industrial coating applications where a smooth surface is required. The primer has excellent adhesion to all organic substrates and to all of our ceramic topcoats. The primer can be applied at a relative humidity of 30-80% and can be painted over within 4 hours 30°C, 1 hours 60°.



## Heavy Duty Primer - Smooth Surfacer





# SIX3

2-Component (2K)

## Primer PU Wood Filler

surface modifier - absorption reducer

<b>Article Nr</b>	: SIX31500 1.5 L / 1.4 kg
<b>Consumption</b>	: 2 layers +/- 175 g/m <sup>2</sup> - 185ml/m <sup>2</sup> 60 micron = 8 m <sup>2</sup>
<b>Reachable area</b>	: 1 layer +/- 115 g/m <sup>2</sup> - 95ml/m <sup>2</sup> 30 micron = 12 m <sup>2</sup>
<b>Hardness</b>	: H4
<b>Colors</b>	: Transparent
<b>Used on</b>	: Wood, Natural Stone, and other organic surfaces
<b>Application area</b>	: Buildings, marine, hotels, private housing, etc.

SIX3 is a solvent borne transparent wood filler. This primer is used as surface modification for, wood or natural stone to reduce capillary absorption and has an excellent adhesion to all organic substrates and towards one of our ceramic top coats. The primer can be applied at a relative humidity of 40-80%.



**Fast Repaintable**



**Excellent adhesion**



## Wood or Natural Stone - Filler

# SIX4

1-Component (1K)

## Primer Acrylic Waterbased

all surfaces modifier

<b>Article Nr</b>	: SIX41000-WH/GR 1L / 1.2kg SIX44000-WH/GR 4L / 4.8kg
<b>Consumption</b>	: 2 layers +/- 240 g/m <sup>2</sup> - 200 ml/m <sup>2</sup> 60 micron = 5 m <sup>2</sup>
<b>Reachable area</b>	: 1 layer +/- 120 g/m <sup>2</sup> - 100 ml/m <sup>2</sup> 30 micron = 10 m <sup>2</sup>
<b>Hardness</b>	: H3
<b>Colors</b>	: White, Grey or RAL (RAL Minimum Order 250 pcs 4 L)
<b>Used on</b>	: Concrete, wood, drywalls and old waterbased paints
<b>Application area</b>	: Buildings, walls and ceilings indoor or outdoor

SIX4 Acrylic Water-Based Primer is a premium, all-purpose primer-sealer with excellent adhesion, stain-blocking, and hiding power. Ideal for both interior and exterior surfaces, it bonds to glossy surfaces without sanding, effectively blocks stains, and provides a smooth foundation for any solvent-based or water-based topcoat.



**Fast Repaintable**



**Excellent adhesion**



**VOC Free**



# SIX5

2-Component (2K)

## Putty Polyester

ultra smooth - sandable

**Article Nr** : SIX51000-WH/GR 1 kg  
**Colors** : White, Grey  
**Used on** : Metal, wood, fiberglass, concrete, plastics  
**Application area** : Buildings, marine, airports, offshore structures, bridges private housing, etc.

SIX5 is a High quality 2 (two) component Epoxy base putty for auto-refinish, marine and industrial coating applications.



**Fast Repaintable**



**Excellent adhesion**

# SOLV

Thinner solvent

for all types of our ceramic paint & coating

**Article Nr** : SOLV0400 400 ml / 345 g SOLV2000 2L / 1.760 g SOLV5000 5 L / 4.400 g

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.



# RETA/ACCL

Retarder  
Accelerator

slow down flash time or speed up curing

**Article Nr** : RETA0400 400 ml / 345 g ACCL0200 200 ml / 180 g

If your application need longer flash time (longer time to build up the layer with a second or third coat you can add the RETA Retarder.

In case you want to speed up the curing process you can add the ACCL Accelerator.



## Scan QR Code for TDS and SDS

**Instructions for use:**  
 Make sure the surface is free from contamination and dirt.  
 A thin (100 µm) primer can be used in case of problems with the substrate or in corrosive circumstances. The Primer should pass the ASTM D3359 adhesion test 5.  
 Mix SIX5+1000 Coating with SIX5200 (Accelerator), or mix it with solvent (up to 10% weight) using a stirrer. The surface must be thoroughly wetted. Apply the mix with a brush or a roller. Thickness to be determined by surface porosity.  
 Let the surface dry for 24 hours. It is touch-dry in 1 hour, after 24 hours 95% cured and the remaining 5% transformation into ceramic is fully cured after 7 days. Be aware that the mixed content cannot be stored longer than 3 hours.  
 TDS: 500 ml / 1.760 g (NET WT: 1.73 kg / 3.81 lbs)  
 Content: 1.8L / 60oz (NET WT: 1.73 kg / 3.81 lbs)

**WARNING:** FLAMMABLE - LIQUID, VAPOR AND SPRAY MIST HARMFUL. EXPOSURE MAY CAUSE EYES IRRITATION, ALLERGIC REACTION OR RESPIRATORY REACTION. MAY BE HARMFUL OR FATAL IF SWALLOWED. MAY CAUSE EYE, SKIN, NOSE AND THROAT IRRITATION.

**2K CERAMIC COATING**  
 Super Durable Utilizes Nano-Technology  
 UV / Chemical / 300°C / 600°F Resistant

**Perfect adhesion on:**  
 Fiberglass, Epoxy, Aluminum, Steel, Concrete, Stone, Wood, Acrylic, Gypsum.

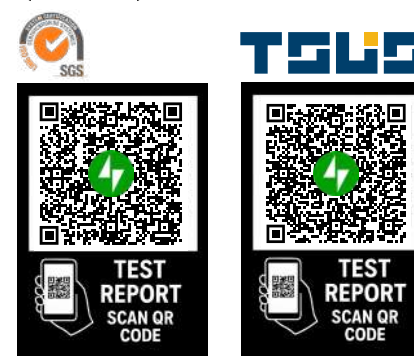
**Content:**  
 Fast Solvent, PTFE, Adhesive, Quaternary Acid.

**Finish:** Glossy  
 Sheen: 51179 (20.907)

**WARNINGS:** FLAMMABLE - LIQUID, VAPOR AND SPRAY MIST HARMFUL. EXPOSURE MAY CAUSE EYES IRRITATION, ALLERGIC REACTION OR RESPIRATORY REACTION. MAY BE HARMFUL OR FATAL IF SWALLOWED. MAY CAUSE EYE, SKIN, NOSE AND THROAT IRRITATION.

**GLOSS** **TRANSPARENT / COLORABLE** **TRANSPARENT**

## (Test) Results



## Videos Application





## How to use our Permanent Coating System:

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

### Processing Temperature:

Ambient temperature: 5-30°C  
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:



Fresh Air  
Respirator



Paint Suit



Nitrile gloves



Professional Paint Sprayer  
1.3-1.7mm / 0.05-0.06" nozzle



Paint Roller  
(Microfiber)



Respirator



Paint Brush  
(acrylic)

### Application information

The SI11/SI12/SI21/SI14/SI31 coatings can be applied directly or indirectly on all surfaces (porous and non-porous) such as concrete, steel, wood, fiberglass, 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 for ferrous metals that are exposed to coastal and marine environments or 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-SI12B-SI21B-SI31B with the can of SI11A-SI12A-SI21A-SI31A by pouring can B into can A, or measure **exactly by NET WEIGHT** in a ratio of 9:1 **by using a scale** and **mix very well**.

Mix SI14A2800 with SI14C0800 with by pouring can C into can A, or measure **exactly by NET WEIGHT** in a ratio of 7:2 **by using a scale** and **mix very well**, then add the entire content of SI14B0400 or measure **exactly by NET WEIGHT** in a ratio of 7:1 (compared to SI14A2800) **by using a scale** and **mix very well**. Carefully pour the mixed contents into a professional paint sprayer, and spray in thin layers until the surface reaches your desired thickness. Depending on the surface, material and structure, different application techniques can be used (such as paint rollers or brushes). 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. If have orange peel you may wet /sand the surface with P1500 and after P2000 and polish with One Step Polish till high shine. The surface can simply be maintained with a high pressure washer at 80 bar using our biologically degradable Reactivating Shampoo. The surface can simply be maintained with a high pressure washer at 80 bar using our biologically degradable Reactivating Shampoo.

### Tool cleaning and Thinner solvent

The individual components, as well as the mixing system of the paint sprayer, can be diluted and cleaned using our solvent. All of our paints and coatings are ready to use, for certain spray applications, especially dark colors which require more color pigment than average, it may be necessary to use our SOLV thinner solvent to achieve optimal flowability.

## How to use our UVA Coating System:

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

### Processing Temperature:

Ambient temperature: 5-30°C  
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:



Respirator



Paint Suit



Nitrile gloves



HVLP Paint Sprayer  
1.0-1.3mm / 0.03-0.05" nozzle



Microfiber Roller  
(6mm short nap)



Cotton Pads



Paint Brush  
(acrylic)

### Instructions for use:

Protect or Renew; Marble, Granite, Varnished wood, HPL, PVC or Vinyl laminate and Melamine. Creates an easy-to-clean, anti-scratch surface that is resistant to UV Discoloration, HF (Hydrofluoric Acid), Hydrochloric Acid, and Citric Acid.

Wipe Application; 1. Clean the surface 2. Sterilize the surface 3. Apply via the cotton pad an even layer 4. Let it cure.

Spray Application; Use an HVLP (High Volume Low Pressure) spray gun with 60-80% transfer efficiency. Fit the spray gun with a 1.0-1.3 mm fluid tip. Set air pressure to 20-30 psi.

### Preparation Steps:

1. Stir the coating thoroughly for 30 seconds before use.
2. Prior to application, strain the mixed coating through a suitable paint filter (e.g., 190-250 µm) to ensure a clean, defect-free spray.
3. Wash and decontaminate the surface.
4. Wet sand / scuff using 1500-2000 grit sandpaper.
5. Mask off any parts not to be coated.
6. Ensure environmental conditions are below 65% humidity.
7. Perform a final clean using 100% acetone.
8. Wipe with a tack cloth to remove any dust or lint.

### Application Procedure:

1. Spray a light, even coat. Allow a 5-minute flash-off time, or until outgassing stops.
2. Apply a second coat. Allow to flash off for at least 15 minutes, or until outgassing stops.
3. Unmask carefully before the coating fully cures.

### Curing:

Tough Dry 5min, Hard Dry 2 Hours, 85% Cured 12 Hours, 100% Cured 5 Days

Refer to the TDS/SDS for more information.

# NANO-CERAMIC®



WWW.NANO-CERAMIC.COM INDUSTRIAL PROTECTIVE COATINGS

**There is no better option than to use  
NANO-CERAMIC!**



## ***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**