NANO-CERAMIC®

WWW.NANO-CERAMIC.COM INDUSTRIAL PROTECTIVE COATINGS

Industrial **System UVA Topcoat**

What is NANO-CERAMIC® System UVA Topcoat

UVA Topcoat is a high-performance coating system built for advanced OEM manufacturing. With a dry-film thickness of just 6–8 microns, it adds exceptional UV, chemical, and abrasion resistance—without impacting weight, tolerances, or design lines.

Compatible with glass, stainless steel, carbon fiber, coated metals, and organic composites, UVA Topcoat is ideal for components where both performance and surface integrity are critical.

Originally developed for aerospace and defense-grade resilience, it now supports emerging technologies in drone manufacturing, sensor systems, and advanced lightweight structures.

MaxHard LowFlex: Ultra-Thin, Ultra-Tough, Ultra Sleek

The MaxHard LowFlex configuration of UVA Topcoat is engineered for rigid components where durability, visual clarity, and protection under extreme conditions are essential.

- Dry Film Thickness: 6–8 microns
- Hardness: 9H (pencil scale)
- Flexibility: Low – for dimensionally stable materials

Ideal For:

- Military and surveillance drones
- Carbon-reinforced UAV airframes
- Optical and sensor glass panels
- Tactical-grade weapon surfaces
- High-end stainless or aluminum skins

Available in transparent, super-transparent tinted, or opaque RAL colors, UVA Topcoat enables camouflage coatings (e.g. sky-blue tones) and signature finishes—without weight

The Invisible Edge: Thin Film, Big Advantage

Traditional coatings are thick, brittle, and degrade under UV exposure. UVA Topcoat MaxHard LowFlex replaces them with a single ultra-thin, high-performance layer that protects while preserving original form and finish.

Key OEM Benefits:

UV-Stable Clarity - Hydrophobic & Easy to Clean - Chemical Resistance to Fuels, Acids, Solvents - Single-Layer Application - Works on Glass, Carbon, Stainless, and Composites Built for environments where every micron matters—UVA Topcoat offers precision finish without compromise.

Cross-Material Bonding for Complex Assemblies

UVA Topcoat MaxHard LowFlex anchors securely to industrial substrates like:

- Glass & Transparent Polymers
- Carbon Fiber
- Steel, Stainless Steel & Aluminum
- Plastics & Polymer Composites
- PCB's Including solder points

Its ultra-thin build preserves tolerances and aesthetic precision across both rigid and advanced composite systems.

Lightweight Armor for Systems in Motion

Designed for airborne and mobile platforms:

- 6–8 µm profile preserves mass balance
- Stealth-ready color options (e.g. sky-blue for drone invisibility)
- Abrasion and impact resistant
- Hydrophobic and anti-fouling
- Stable under temperature and UV stress
- Perfect for drones, weapon frames, optical gear, and carbon-built mobility platforms.

Protecting people, equipment, and the planet

UVA Topcoat is mission-ready and future-compliant:

- Non-PFAS formula
- Low VOC – Cleanroom-safe
- Food-contact safe (for high-touch surfaces
- Reduced application complexity and waste

Visual Performance Without Optical Compromise

Ideal for stainless steel, glass and optics:

- Non-distorting clarity
- UV blocking, non-yellowing layer
- Hydrophobic and anti-smudge
- Super-transparent colors for functional camouflage

Reliable protection that lets optics and sensors perform at peak clarity.

Smart Aesthetics: From Stealth to Signature

UVA Topcoat adapts to visual design needs:

- Sky-tone or cloud-matching finishes for drones
- Translucent branding tints or solid RAL coverage
- Matte or gloss as required
- Always at 6–8 microns for zero tolerance disruption

Built-In Efficiency for Manufacturing and Assembly

- Self-leveling for smooth, even coverage
- Spray or roll or wipe application
- Dust-resistant surface cure
- Fast handling and UV curing compatibility
- Robotic and automated line ready

Engineered to match the pace and precision of modern OEM lines.

The Invisible Barrier: Protection Without Presence

Delivers maximum resilience with minimal footprint:

- No bulk, no added form
- Maintains tolerances and design edges
- Invisible defense against UV, chemicals, and abrasion

You don't see it—but it works harder than anything else on the surface.

Field-Tested Performance. Lab-Verified Durability.

- H9 surface hardness
- 6–8 micron thickness
- UV resistance: 1000+ hrs exposure, no yellowing
- Cross-material adhesion
- Chemical resistance: HF, HCl, ethanol, citric acid
- Stable through thermal cycling and abrasion tests

Validated in the lab. Proven in the field.

Formulated to Solve What Others Can't

UVA Topcoat is engineered to overcome the traditional weaknesses of standard dielectric and surface coatings, offering a fine-tuned balance of adhesion, durability, and electrical insulation.

Integrated Performance Highlights:

Built-in flexibility and toughness to prevent cracking under stress
Stable adhesion to glass, metal, composite, and electronic surfaces
UV-blocking capability for outdoor or exposed electronics
Excellent surface hardness with mechanical resilience

Dielectric Strength:

Estimated at ~20–24 kV/mm, UVA Topcoat forms a dependable insulating barrier ideal for printed circuit boards and other sensitive components requiring moisture resistance and electrical separation.

The Result:

High dielectric protection in thin-layer format
Visual transparency or stealth-oriented coloration
Reliable adhesion under flex, UV, or chemical exposure
Ultra-thin weight-saving coating for UAVs, optics, electronics, and weapon-grade components

This isn't just a coating—it's an engineered surface technology for the industries defining the next decade.

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:
12.5 ml/m² per layer (wipe or spray), achieving a film thickness of approximately 6 microns
Coverage per liter:

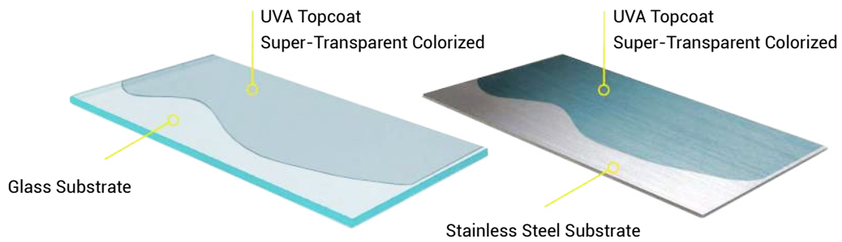
Redefining the Limits: Color for Ultra-Thin Protection

Blending NANO-CERAMIC Super Transparent Colorants into our UVA Topcoat creates vibrant, transparent finishes that offer both striking visual appeal and advanced surface protection. These super-transparent colorants are specifically formulated to deliver clear, halogen-free color effects—ideal for applications where the underlying surface, such as glass or metallic layers, should remain visible. Unlike traditional opaque pigments used for so lid-color coatings, this formulation maintains clarity while adding durable color.

This advanced coating system is ideal for architectural glass, wall partitions, furniture components, signage, and display surfaces—transforming everyday glass into design-driven, functional elements. The system supports a wide range of RAL-based shades, allowing for delicate, precise tinting of the topcoat layer without compromising its film integrity or transparency. This makes it possible to design with color while maintaining clarity, thinness, and technical performance—especially important in modern interior and exterior applications.

These pigment dispersions offer extremely low VOC contribution, outstanding dispersion behavior, excellent thermal and UV stability, and high scratch resistance—making them the perfect choice for high-performance ultra-thin or effect-driven coating systems.

When applied to glass, the combination of colorants and UVA Topcoat not only provides subtle, elegant color but also enhances functionality. The surface gains long-term scratch resistance, chemical durability, and hydrophobic properties that make it easier to clean and maintain.



New Potential through Transparency and Color Strength

This advanced hybrid coating system—combining UVA Topcoat, with the NANO-CERAMIC Super Transparent Colorants—enables a wide range of high-value creative and industrial applications, especially where clarity, durability, and refined aesthetics are required.

In architectural and interior design, the coating can be applied to glass walls and partitions to create lightly tinted, UV- and scratch-resistant privacy panels that enhance modern office and hospitality spaces. Tempered glass backsplashes in kitchens gain soft transparent hues that are heat- and stain-resistant and easy to clean.

Shower enclosures benefit from anti-fingerprint, water-repellent, and chemical-resistant properties, along with a soft decorative tint. Lighting diffusers and panels are enhanced with UV-stable translucent coatings that reduce glare and soften illumination.

Sinks and bathtubs made of porcelain or melamine can be coated with a translucent layer over white, creating remarkable effects.

On balconies and staircases, tinted coatings are applied directly to the glass balustrades and steps, adding both durability and visual appeal.

For furniture and product design, the coating creates a refined, lightly tinted finish on cabinet doors, especially glass inserts. Tables used in dining or conference settings gain scratch-resistant, easy-clean surfaces in modern tones. Frosted or semi-gloss finishes on floating shelves and sliding glass doors elevate minimalist design with subtle color.

Glass facades can be retrofitted by light sanding and applying our exterior UVA topcoat. This process gives tall buildings a modern look, while the windows repel water, dirt, and block solar heat before it reaches the glass.

It also integrates seamlessly with switchable glass and LC/PDLC panels, adding both surface protection and color flexibility. Signage and display panels benefit from clean, consistent finishes, ideal for branding and backlit applications.

Expanding Beyond Glass: Solutions for Stainless Steel

The advanced hybrid coating system also performs exceptionally well on stainless steel and other metal surfaces, offering not only functional protection but also a refined visual finish.
When applied as an ultra-thin layer, the coating enhances surface durability while preserving the material's natural texture and reflectivity.

It significantly improves scratch resistance, reduces fingerprint visibility, and increases chemical and corrosion resistance—making stainless steel easier to maintain in both private and public environments.

By incorporating NANO-CERAMIC Super Transparent Colorants, the coating can introduce elegant color tones such as warm gray, smoke, champagne, or bronze. These subtle tints provide a modern, high-end appearance without obscuring the metal's surface quality. The result is a finish that looks sophisticated yet remains highly functional under daily use.

This makes the system ideal for applications in interior architecture, appliance surfaces, kitchen and bathroom fixtures, elevator panels. It adheres well to stainless steel or aluminium and retains transparency and performance even at film thicknesses below 15 microns.
With this combination of durability and design flexibility, the coating extends its value far beyond glass into high-touch, high-visibility metal environments.

Multi-Talent in Application

UVA Topcoat isn't just versatile in where it's used—but also in how it's applied. Its advanced leveling and viscosity make it easy to apply using tools you already have.

Application Options (Examples):

- Countertops & Tables: Wipe on with cotton pads or spunbond wipes.
- Walls (Interior/Exterior): Roll on with ¼" short-nap microfiber roller.
- Metal Panels & Large Surfaces: Spray on with any system (HVLP recommended).

Optimal Spray Application with HVLP

For best results and minimal waste, HVLP (High Volume Low Pressure) spray guns are recommended.

Transfer efficiency: HVLP: 60–90%, Conventional air spray: 25–40%

Why HVLP?

- Significantly reduces overspray
- Less risk of air contamination (air spray gun carries this risk).
- Lowers material waste
- More cost-effective and environmentally friendly
- Ensures uniform film build with superior leveling

  Working pressure: ca. 2 – 3 bar
  Nozzles: 0.8 – 1.3 mm 0.03-0.05"

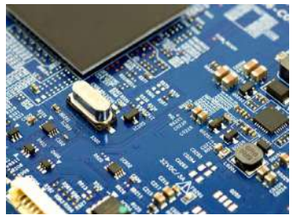
By combining precision application with ultra-low film thickness, UVA Topcoat sets a new standard for coating efficiency—without compromising durability or performance.

Direct to Substrate “Examples”

WEAPONARY

ROBOTICS

STAINLESS



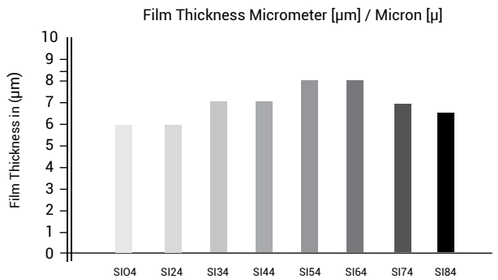
PCB’S

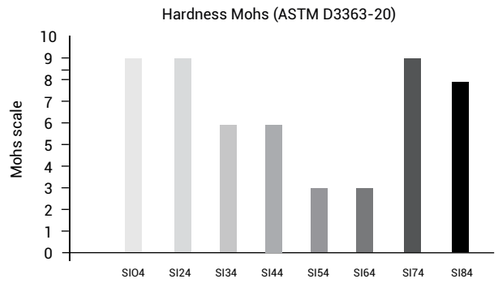
DRONES

GLASS

Superb adhesion on virtually any substrate

Substrate	Suitability	Substrate	Application Suitability
Concrete / Cement / Plaster	Excellent	Stainless Steel	Excellent
Fibre Cement Boards	Excellent	Plexiglass	Excellent
Gypsum Boards	Excellent	Plastics	Excellent
Brick / Masonry	Excellent	Anodized Aluminium	Excellent
Acrylic Latex (Water-Based)	Excellent	Tarpaulin (PVC)	Excellent
Acrylic / Emulsion Paint	Excellent	Epoxy (2K)	Good (sand first)
Steel / Zinc	Excellent	Elastomeric Paint (Aqua Proof)	Good (sand first)
Marble / Ceramics	Excellent	Mild Steel (Clean or Light Rust)	Good (with rust convertor)
Glass	Excellent	Polyurethane PU (2K)	Fair (sand first)
		Alkyd (Solvent based)	Fair (sand and clean first)

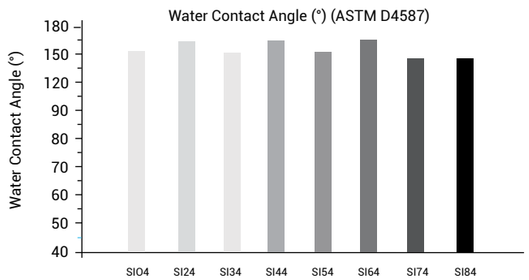




Quality Comparison of Paints Technologies.

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 Topcoat 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
Water Vapour Permeability	**Average**	**Average**	Good	**Average**	Excellent
Water Absorption Rate	**5-15%**	**1%**	**2%**	**3%**	0%
Aging at 158°F	**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)

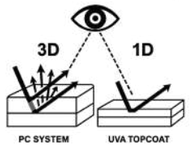
H9 UVA Topcoat Transparent
for glossy surfaces

Article Nr : SIO41LUVA 1L / 920 g SIO405UVA 500 ml / 460 g
Consumption : 3 layers ± 34.6 g/m² - 37.5 ml/m² 18 micron = 20 m²
Reachable area : 2 layers ± 23.0 g/m² - 25.0 ml/m² 12 micron = 40 m²
: 1 layer ± 11.5 g/m² - 12.5 ml/m² 6 micron = 80 m²
Hardness/Cupping : H9 / Flexibility ISO 1520 >0.83"
Used for : The system can be applied directly or indirectly on all kind of non-porous surfaces, we refer to page 4 of this brochure for a detailed overview.
Application area : Industrial, professionals

How to use: Page 16-19

MaxHard LowFlex

How does it look visually?



SIO4 is a high-performance single-component coating and paint system with extremely high hardness, designed for hard, non-flexible surfaces. The coating forms a dense and highly durable molecular bonding matrix (ceramic transformation), providing permanent surface protection.

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
- 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)

Near-permanent
Anti-corrosion
Permanently hydrophobic
Anti-pollution
Anti-algae
UV protection
Self-cleaning Easy to clean
Impact resistance 1 kg / 80 cm
Thermal shock-Resistant

SI24 1-Component (1K)

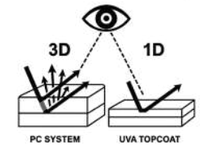
H9 UVA Topcoat Transparent
for matte surfaces

Article Nr : SI241LUVA 1L / 920 g SI2405UVA 500 ml / 460 g
Consumption : 3 layers ± 34.6 g/m² - 37.5 ml/m² 18 micron = 20 m²
Reachable area : 2 layers ± 23.0 g/m² - 25.0 ml/m² 12 micron = 40 m²
: 1 layer ± 11.5 g/m² - 12.5 ml/m² 6 micron = 80 m²
Hardness/Cupping : H9 / Flexibility ISO 1520 >0.83"
Used for : The system can be applied directly or indirectly on all kind of non-porous surfaces, we refer to page 4 of this brochure for a detailed overview.
Application area : Industrial, professionals

How to use: Page 16-19

MaxHard LowFlex

How does it look visually?



SI24 is a high-performance single-component coating and paint system with extremely high hardness, designed for hard, non-flexible surfaces. The coating forms a dense and highly durable molecular bonding matrix (ceramic transformation), providing permanent surface protection.

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
- 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)

Near-permanent
Anti-corrosion
Permanently hydrophobic
Anti-pollution
Anti-algae
UV protection
Self-cleaning Easy to clean
Impact resistance 1 kg / 80 cm
Thermal shock-Resistant

SI34 1-Component (1K)

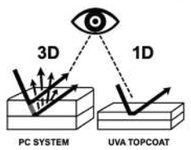
H6 UVA Topcoat Transparent
for glossy surfaces

Article Nr : SI341LUVA 1 L / 920 g SI3405UVA 500 ml / 460 g
Consumption : 3 layers ± 34.6 g/m² - 37.5 ml/m² 18 micron = 20 m²
Reachable area : 2 layers ± 23.0 g/m² - 25.0 ml/m² 12 micron = 40 m²
: 1 layer ± 11.5 g/m² - 12.5 ml/m² 6 micron = 80 m²
Hardness/Cupping : H6 / Flexibility ISO 1520 >0.94"
Used for : The system can be applied directly or indirectly on all kind of non-porous surfaces, we refer to page 4 of this brochure for a detailed overview.
Application area : Industrial, professionals

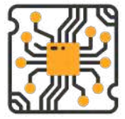
How to use: Page 39

MedHard
MedFlex

How does it look visually?



SI34 is a high-performance single-component coating and paint system with a balanced combination of hardness and flexibility, designed for a wide range of surfaces. The coating forms a dense and durable molecular bonding matrix (ceramic transformation), providing permanent surface protection.



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
- Superb adhesion even on glass.
- Superb adhesion even on glass or stainless steel.
- Transparent, Opaque, solid-color or vibrant, transparent color finishes.

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

Near-permanent
Anti-corrosion
Permanently hydrophobic
Anti-pollution
Anti-algae
UV protection
Self-cleaning Easy to clean
Impact resistance 1 kg / 80 cm
Thermal shock-Resistant

SI44 1-Component (1K)

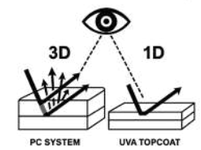
H6 UVA Topcoat Transparent
for matte surfaces

Article Nr : SI441LUVA 1 L / 970 g SI4405UVA 500 ml / 485 g
Consumption : 3 layers ± 34.6 g/m² - 37.5 ml/m² 18 micron = 20 m²
Reachable area : 2 layers ± 23.0 g/m² - 25.0 ml/m² 12 micron = 40 m²
: 1 layer ± 11.5 g/m² - 12.5 ml/m² 6 micron = 80 m²
Hardness/Cupping : H6 / Flexibility ISO 1520 >0.94"
Used for : The system can be applied directly or indirectly on all kind of non-porous surfaces, we refer to page 4 of this brochure for a detailed overview.
Application area : Industrial, professionals

How to use: Page 39

MedHard
MedFlex

How does it look visually?



SI44 is a high-performance single-component coating and paint system with a balanced combination of hardness and flexibility, designed for a wide range of surfaces. The coating forms a dense and durable molecular bonding matrix (ceramic transformation), providing permanent surface protection.

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
- Superb adhesion even on porcelain, 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)

Near-permanent
Anti-corrosion
Permanently hydrophobic
Anti-pollution
Anti-algae
UV protection
Self-cleaning Easy to clean
Impact resistance 1 kg / 80 cm
Thermal shock-Resistant

SI54 1-Component (1K)

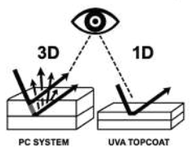
H3 UVA Topcoat Transparent
for glossy surfaces

How to use: Page 39

Article Nr : SI541LUVA 1 L / 920 g SI5405UVA 500 ml / 460 gr
Consumption : 3 layers ± 34.6 g/m² - 37.5 ml/m² 18 micron = 20 m²
Reachable area : 2 layers ± 23.0 g/m² - 25.0 ml/m² 12 micron = 40 m²
: 1 layer ± 11.5 g/m² - 12.5 ml/m² 6 micron = 80 m²
Hardness/Cupping : H3 / Flexibility ISO 1520 >1.02"
Used for : The system can be applied directly or indirectly on all kind of non-porous surfaces, we refer to page 4 of this brochure for a detailed overview.
Application area : Industrial, professionals

LowHard MaxFlex

How does it look visually?



SI54 is a high-performance single-component coating and paint system with maximum flexibility and lower hardness, designed for surfaces that require high elasticity and resistance to movement. The coating forms a dense and durable molecular bonding matrix (ceramic transformation), providing permanent surface protection.

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
- Superb adhesion even on epoxy or PU
- Can be sprayed multilayered.
- Transparent, Opaque, solid-color or vibrant, transparent color finishes.

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

Near-permanent
Anti-corrosion
Permanently hydrophobic
Anti-pollution
Anti-algae
UV protection
Self-cleaning Easy to clean
Impact resistance 1 kg / 80 cm
Thermal shock-Resistant

SI64 1-Component (1K)

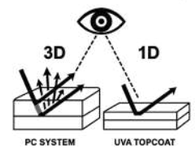
H3 UVA Topcoat Transparent
for matte surfaces

How to use: Page 39

Article Nr : SI641LUVA 1 L / 970 g SI6405UVA 500 ml / 485 g
Consumption : 3 layers ± 34.6 g/m² - 37.5 ml/m² 18 micron = 20 m²
Reachable area : 2 layers ± 23.0 g/m² - 25.0 ml/m² 12 micron = 40 m²
: 1 layer ± 11.5 g/m² - 12.5 ml/m² 6 micron = 80 m²
Hardness/Cupping : H3 / Flexibility ISO 1520 >1.02"
Used for : The system can be applied directly or indirectly on all kind of non-porous surfaces, we refer to page 4 of this brochure for a detailed overview.
Application area : Industrial, professionals

LowHard MaxFlex

How does it look visually?



SI64 is a high-performance single-component coating and paint system with maximum flexibility and lower hardness, designed for surfaces that require high elasticity and resistance to movement. The coating forms a dense and durable molecular bonding matrix (ceramic transformation), providing permanent surface protection.

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
- Superb adhesion even on epoxy or PU
- Can be sprayed multilayered.
- Transparent, Opaque, solid-color or vibrant, transparent color finishes.

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

Near-permanent
Anti-corrosion
Permanently hydrophobic
Anti-pollution
Anti-algae
UV protection
Self-cleaning Easy to clean
Impact resistance 1 kg / 80 cm
Thermal shock-Resistant

UVA Topcoat Colorants

Precision Color Control — From Super-Transparent Tints to Bold, Defined Shades

As a coating manufacturer, we use advanced colorant chip technology to produce fully prepared, ready-to-use colorants that integrate seamlessly into our coating systems.

The colorant chips themselves are selected, processed, and blended by us under controlled conditions, resulting in liquid colorants with precise concentration, high transparency, and excellent stability. Our customers receive a finished colorant product and do not need to handle or process chips in any way.

Because the colorants are supplied ready to use, incorporation into our coating systems is simple and straightforward. The required amount of colorant can be added directly to the coating and mixed using standard stirring or mechanical mixing.

The colorant disperses quickly and evenly, without streaking, cloudiness, or the need for special equipment. This makes color adjustment easy and reliable, even for small batches or on-site applications.

By controlling the entire process—from coating and colorant chip selection to finished colorant production—we ensure consistent color accuracy and repeatability from batch to batch.

The colorants are specifically engineered to remain fully compatible with our high-performance binder technologies. As a result, color can be introduced without compromising transparency, gloss, durability, or chemical resistance.

The outcome is a coating system in which professional color control—from super-transparent shades to bold finishes—is achieved with minimal effort for the user: add the colorant, mix, and apply.

APPLY VIDEO SCAN QR CODE

WHITE UVAWH0100

Masstone to Transparent Tint

SI080 **0.32 oz**

BLACK UVABK0100

Masstone to Transparent Tint

S9938 **0.32 oz**

YELLOW UVAYE0100

Masstone to Transparent Tint

S2184 **0.32 oz**

RED UVARD0100

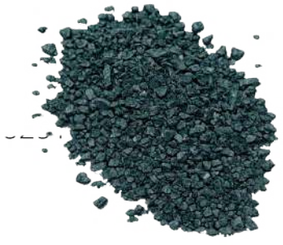
Masstone to Transparent Tint

S4254CN **0.32 oz**

BLEU UVABL0100

Masstone to Transparent Tint

S5007 **0.32 oz**



GREEN UVABL0100

Masstone to Transparent Tint

S7154N **0.32 oz**

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:

Fresh Air Respirator

Paint Suit

Nitrile gloves

HVLP Paint Sprayer
1.3mm / 1.5mm / 1.8mm nozzle

Microfiber Roller
(6mm short nap)

Cotton Pads

Paint Brush
(acrylic)

Instructions for use:
The coating range is specifically developed for non-porous, pre-coated, and sealed substrates.The coatings support both wipe application and spray application, depending on the substrate and project requirements.
• Wipe application (limited to specific substrates, mainly countertops and tabletops):
Marble, Granite, Varnished Wood, HPL, PVC/Vinyl, Laminate, and Melamine
• Spray application (recommended for all compatible substrates):
Glass, metals, coated surfaces, plastics, composites, and large surface areas

Refer to the type/substrate compatibility table on page 43.

SURFACE PREPARATION (FOR ALL APPLICATION METHODS)

1. Cleaning
Thoroughly clean the surface using a suitable detergent.
Rinse with clean water and allow the surface to dry completely.

2. Surface Activation (Scuffing)
For optimal adhesion, lightly prepare the surface.

Preferred method:
Grey Scotch-Brite (P1000–P1500 equivalent)

Alternative:
Sandpaper P1000–P1200

Important:
• Do not use P800 or lower • Do not use P2000 (too smooth)
Surface must be uniformly matte, without visible deep scratches.

Marble-Specific Guidance
For polished marble, light scuffing is recommended to ensure adhesion.
Only remove surface gloss—do not damage the stone.
For honed or matte marble, scuffing may not be required.

3. Final Cleaning
Wipe using IPA or acetone with a lint-free cloth.
Remove remaining dust using a tack cloth.

A. WIPE APPLICATION (LIMITED SUBSTRATES ONLY)

Applicable surfaces (mainly countertops and tabletops):
Marble, Granite, Varnished Wood, HPL, PVC/Vinyl, Laminate, Melamine

Application Steps
Apply a thin, even layer using a cotton pad
Ensure full and uniform coverage; the coating will self-level
Allow to cure

Important
• Apply only 1 layer
• Do not apply thick layers; apply only enough material to allow a single thin layer to self-level
• Avoid overworking the surface

B. SPRAY APPLICATION (PROFESSIONAL USE – ALL COMPATIBLE SUBSTRATES)

Equipment
• HVLP spray gun (60–80% transfer efficiency) • Nozzle: 1.0 – 1.3 mm (0.04–0.05″) • Air pressure: 20–30 psi

Preparation
Stir coating for 30 seconds
Filter through a 190–250 µm paint filter for optimal optical clarity (recommended)
Ensure humidity < 65%

Additives & Adjustments (Spray Application Only)
• SOLV Solvent: 0–3% recommended (max 5%) – for viscosity adjustment
• RETA Retarder: 0–1% recommended (max 2%) – for hot conditions / better flow
• ACCL Accelerator: 0–1% recommended (max 2%) – for cold conditions / faster cure
• Colorants (UVA):
  – Transparent: 0.5–2% (max 3%)
  – Full color: 5–10% (max 10%)

Do not exceed limits; avoid combining high retarder and accelerator; always test before use.

Application Procedure
Apply a light, even first coat
→ Flash-off: ~5 minutes (until outgassing stops)
Apply a second thin coat
→ Flash-off: ≥15 minutes
Remove masking before full cure
→Third layer only if layers are applied very thin

CURING PROFILE (APPLIES TO BOTH METHODS)

Ambient Curing:
Dust/Tack Free: ~5 minutes • Hard Dry: ~2 hours • 85% Cured: ~12 hours • Full Cure: ~5 days at a temperature of 60–80°C • Keep surface dry for the first 24 hours.

Heat Curing:
Duration: 30–60 minutes depending on part mass and material.
Use infrared (IR) lamps or heat guns • Maintain surface temperature at 60–80°C
Hold temperature for approximately 20 minutes per panel

Why Heat Curing Strengthens the Coating Matrix:
Heat curing accelerates the cross-linking reaction in the coating's internal network. This forms a denser, more uniform ceramic-like molecular matrix, resulting in:
Improved chemical and UV resistance. Higher hardness (up to H9). Long-term durability.

In short: Heat transforms the coating from a soft film into a tough, tightly bonded ceramic barrier — especially critical on steel to withstand mechanical and thermal stress.

APPLICATION PRINCIPLES

• Thin layers ensure optimal performance
• Excessive thickness may cause defects or cracking
• Always apply in shaded conditions (no direct sunlight)

QUICK APPLICATION SUMMARY

Wipe (1 layer only – countertops & tabletops):
Clean → Dry → Scuff → IPA → Thin Coat → Cure

Spray (2 layers):
Clean → Scuff → IPA → Spray Coat → Flash → Spray Coat → Cure

KEY TECHNICAL MESSAGE

A smooth, slightly matte surface combined with thin, controlled layers ensures maximum adhesion, durability, and long-term performance. Remove remaining dust using a tack cloth.

A. WIPE APPLICATION (LIMITED SUBSTRATES ONLY)

Applicable surfaces (mainly countertops and tabletops):
Marble, Granite, Varnished Wood, HPL, PVC/Vinyl, Laminate, Melamine

Application Steps
Apply a thin, even layer using a cotton pad
Ensure full and uniform coverage; the coating will self-level
Allow to cure

Important
• Apply only 1 layer
• Do not apply a very thick layer, but apply enough material to allow the coating to self-level.

Technical Guidance & Application Details
For more detailed and application-specific recommendations, please refer to the Technical Data Sheet (TDS). In case of any uncertainty, please contact our technical support team for further assistance.

UVA Coating Selection Guide (Decision Matrix)

Step 1 — Identify substrate behavior (this matters more than the Substrate Material name)

Substrate Behavior	Examples	Recommended Coating
Rigid / No movement	Glass, ceramics, polished stone	SIO4 (MaxHard LowFlex)
Semi-rigid / slight movement	Metals, epoxy, PU 2K, car clearcoat, gelcoat	SI34 (MedHard MedFlex)
Flexible / high movement	Plastics (PMMA, PC, ABS), elastomeric paint, soft PU	SI54 (LowHard MaxFlex)

Designed for Non-Porous & Pre-Coated Surfaces

Substrate Material	SIO4 MaxHard LowFlex SI24 MaxHard LowFlex SI74 MaxHard LowFlex	SI34 MedHard MedFlex SI44 MedHard MedFlex SI84 MedHard MedFlex	SI54 LowHard MaxFlex SI64 LowHard MaxFlex
Glass	☑		
Ceramics / Ceramic Tiles	☑		
Marble / Polished Stone	☑		
Stainless Steel		☑	
Steel (clean smooth)		☑	
Zinc / Galvanised Steel		☑	
Anodized Aluminum		☑	
Epoxy (2K Coating / Floor)		☑	
Polyurethane PU (2K hard)		☑	
Polyurethane PU (1K soft)			☑
Car Clear Coat		☑	
Polyester (Gelcoat / FRP)		☑	
Acrylic Primer / Topcoat		☑	
Acrylic Latex Paint		☑	
Acrylic / PMMA (Plexiglass)			☑
Elastomeric Paint			☑
Varnished Wood	☑		
HPL (High Pressure Laminate)	☑		
Melamine Surfaces	☑		
Composite Panels	☑		
Polycarbonate (PC) or ABS Plastic			☑
Tarpaulin PVC			☑

NANO-CERAMIC®

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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