ARTDESHINE



DETAILING ALCHEMIST PIONEERS VISIONARIES



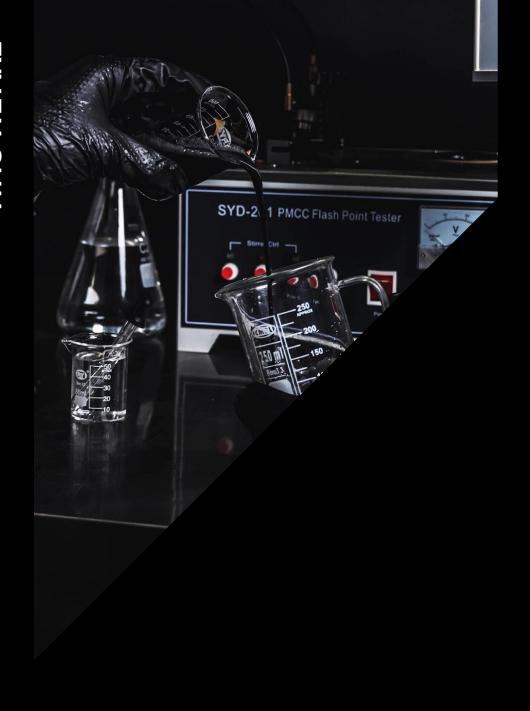
AUTOMOTIVE DETAILING

- Since 1999
- Detailing Studio Operations
- Showroom Vehicle Maintenance
- Automotive Dealer Delivery
- Technical & Skills Training

Artdeshine has been in the detailing industry for over 20 years and is still actively involved today. With an in-house detailing studio used for Artdeshine employees to understand product capabilities and to conduct R&D using real world scenarios. Our detailing team contributes feedback on user experience, performance towards the formulation of our products.

Apart from detailing services, Artdeshine actively uses our background in detailing to provide technical and product training for our installers.





FORMULATION & MANUFACTURING

- Since 2010
- Brand Building ARTDESHINE

Product formulation only started out as a passion and growing interest in trying to improve the quality of products we used in detailing services. As the access of professional grade products especially paint protection coatings in Singapore was only limited to foreign imported brands that were very costly and not up to expectations back then, we took the matter into our own hands. That kick-started the process of learning how such products are being made.

From a small-scale production using manual processes, we have improved our capabilities to using technology and automation to increase our manufacturing volume today.

As manufacturing output increased, this shifted our focus from service providing into management of the brand itself as our professional users require us to provide technical advice, training and even branding/marketing efforts. With such a huge responsibility on our shoulders, it was all hands on deck to shift our identity from a service providing business to an automotive care products brand.

Aside from producing Artdeshine branded products, we provide customised coating solutions to many brands globally. These are white-label or private labelled products using formulas made according to client's specifications.



Scan or press QR for full Product Catalogue

FORMULATION & MANUFACTURING

- Own Factory & Facilities
- White Labelling Services











THE SCIENCE BEHIND ARTDESHINE COATINGS

SiO2 GLASS CERAMIC QUARTZ CRYSTAL

ALL THE SAME

Most surface protection coatings are made using many different silicon based polymers and silanes, that all contain silicon (Si) groups including SiO2.

This is the reason why manufacturers affix names like GLASS, CERAMIC, QUARTZ, CRYSTAL to their products since these are derived from SiO2. They are simply just names for ease of marketing.

All of Artdeshine's coating formulations utilizes the same silicon based polymers and silanes as with many other brands/manufacturers. We call some of our products "ceramic coatings" too.

Asking how many % is SiO2 is irrelevant here. As they are NOT MADE FROM SiO2 alone. More is not better, less is not worse.

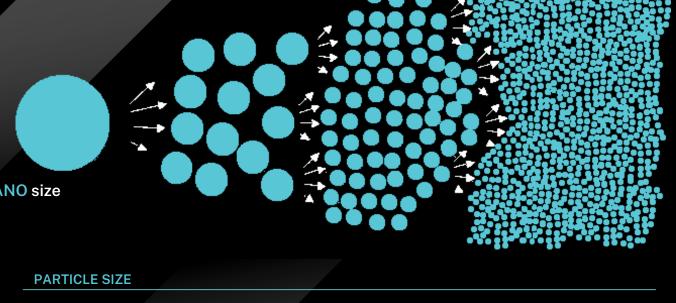
GRAPHENE COATING?

- SAME base silicone polymer coating
- Is NOT made from graphene
- Graphene Oxide/Carbon Nano-Tubes processed to NANO size

Even our graphene coatings are no exception. They are still silicone based polymer coatings. We disperse Graphene additives that are processed into nano sized particles smaller than 1 micron into the formulation, hence the name. To compare, a strand of human hair is about 50 microns.

With nano sized particles, we are able to increase the particle count to provide a higher concentration and coating surface coverage. Our proprietary processing methods allow for a stable dispersion in a polymer matrix.

Every bottle of coating contains not more than 1000ppm of Graphene additives (0.1%). It is MORE THAN SUFFICIENT. It does not mean more is better. Just like you can't have 99% sugar in your coffee, it does not make it better.



PARTICLE SIZE			
10 cm	1 mm	1 μm	1 nm
SURFACE			
1	100	100.000	100.000.000

HARNESSING CAPABILITIES OF GRAPHENE CARBON NANOTUBES (CNT)

Artdeshine's breakthrough in polymer coating technology marks a new era in surface care. By integrating carbon nanotubes (CNT) into our innovative formulas, we've unlocked exceptional capabilities. This development is a testament to our commitment to pioneering exceptional products. The result is a coating solution that not only offers impressive antistatic properties but also ensures surfaces remain cleaner for longer. Experience the pinnacle of cleanliness and care with our advanced CNT-infused polymer coatings.

STAYS CLEANER LONGER
LESS CLEANING FREQUENCY
SAVE TIME EFFORT MONEY

UN-TREATED PANEL (more dirt remains)

ADS CNT COATING (less dirt remains)

	Shore A Hardness MORE DURABLE, TOLERATES MORE WASHING/CLEANING	Sliding Angle (deg) HYDROPHOBIC EFFECT	DPUR(ΔL) DIRT/DUST REPELLING EFFECT & CLEANLINESS
GENERIC COATING	31	28.5	74.1
ADS CUT COATING	55	23.3	50.4
OVERALL IMPROVEMEN	T 77% harder	18% better	31% better

ARTDESHINE COATINGS WITH CNT ARE DENOTED WITH A +

Results may vary depending on type of ADS coating used, above figures derived using ADS CNT Coating with 1000ppm CNT loading.

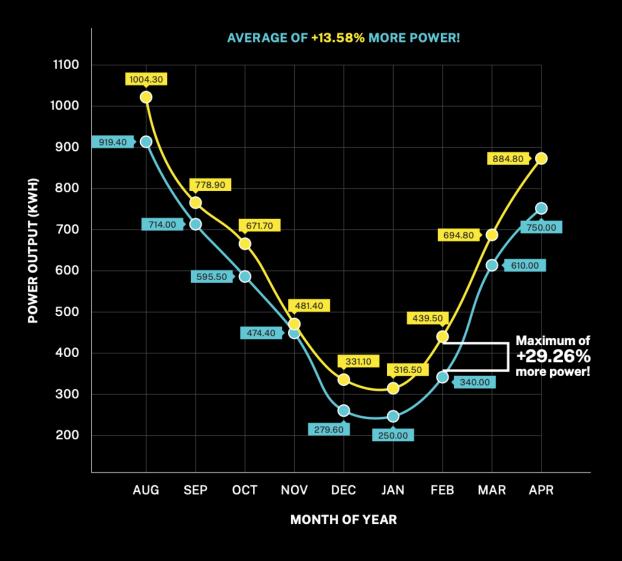


SOLAR PANEL POWER OUTPUT EFFICIENCY WITH GUARDIAN COATING

Invest in Guardian, reap the rewards with more power generated!*

Cleaner = Better solar panel efficiency





— COATED — UN-COATED

Both GO and CNT are Graphene additives used in Artdeshine coatings. All our graphene additives are tediously reduced to nano sized particles for maximum effectiveness.

Artdeshine coatings with CNT additives are denoted with a + symbol.

KEY DIFFERENCES

GRAPHENE

OXIDE (GO)

The use of GO in our formulations is for the sole objective of fighting off water-spots, etching and staining. These are usually caused by corrosion due to exposure to contaminants or harmful substances.

Using CNT enhances antistatic dirt repelling, waterrepellency, hardness, and corrosion resistance. The increased coating hardness is crucial for dust repellency and resisting abrasion from cleaning, resulting in fewer water spots. CNT also prolongs hydrophobic properties, which can degrade over time due to UV exposure.

CARBON

(CNT)

NANOTUBES

Repels dirt with anti-static

Increases coating hardness

Improved water-repellency due to hardness & anti-static properties

Increases corrosion resistance

> Reduces water-spotting, etching and staining

Slows down UV degradation of hydrophobic properties

Black in appearance

Reduces water-spotting, etching and staining



Increases corrosion resistance



Brown in appearance









9H COATINGS

Ability to resist 9H pencil scratch

9H IS NOT THE HARDNESS

Hardness is rated by various other methods

LESS FRICTION = LESS FORCE = LESS MARRING

As most coatings are made to cure very hard, they are often touted as anti-scratch solutions. This is very far from the truth.

Indeed as a thick piece of cured sample, the scratch resistance capability is exhibited clearly. However as a thin film coating applied by hand on substrates like automotive bodies, this capability is negligible.

Artdeshine works around by decreasing the amount of friction on a coated surface. Our coatings are made super slick to reduce friction that will in turn lead to reduced marring.

PENCIL GRADES

9H 8H 7H 6H 5H 4H 3H 2H H F HB B 2B 3B 4B 5B 6B 7B 8B 9B

HARDER SOFTER DARKER



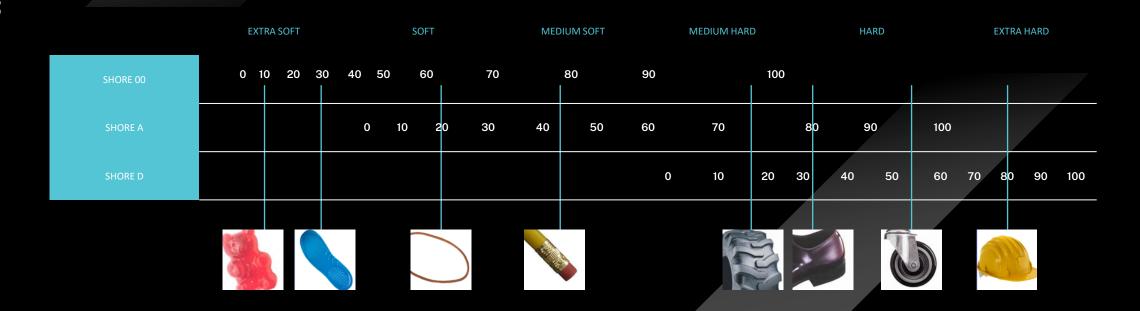
Scan or press QR to see our slickness in action!

/// ARTDESHINE

SHORE A HARDNESS

Alternative measurement of polymer hardness

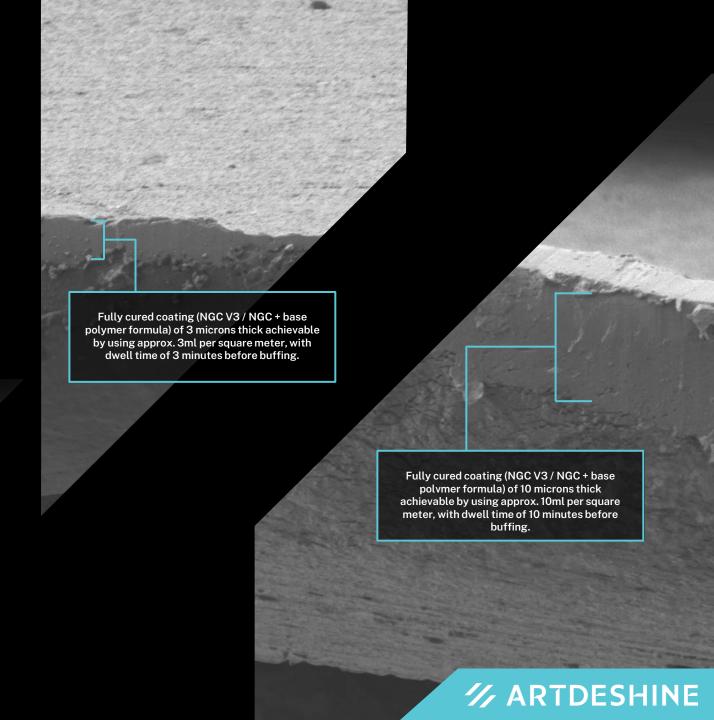
Artdeshine's silicone polymer coatings, INCLUDING Nano Graphene Coating is made to be flexible and tensile, with a measurement of ranging from 30 to 65 using SHORE A.



COATING THICKNESS HOW THICK IS ENOUGH?

Theoretically, the thicker the coating, the more it can resist erosion - wear and tear from abrasion or friction caused by cleaning, washing, wiping, etc.. This is in direct relation to durability based on wash cycles or frequency of cleaning. With hand applied methods, it may be impossible to achieve coating thickness of above 20microns while meeting aesthetic expectations like gloss, shine and reflectivity.

Artdeshine coatings are formulated to ensure that with the right application methods and right amount of products, you can achieve a thicker coating.



WATER-SPOTS WATER-MARKS ETCHING-MARKS

- Caused by combination of liquid, heat/UV, contaminants
- Rain, bird poo, tree sap, salts, oils
- Permanent dulling
- · Removable only by abrasive polishing

These spots/marks are caused by contaminants etching into the clear-coat or even matte/gloss PPF. When rainwater mixes with contaminants like bird poo, tree sap, salts and oils, heat/UV aggravates the chemical reaction. They then slowly etch or corrode the surface.



UP TO 80% REDUCTION

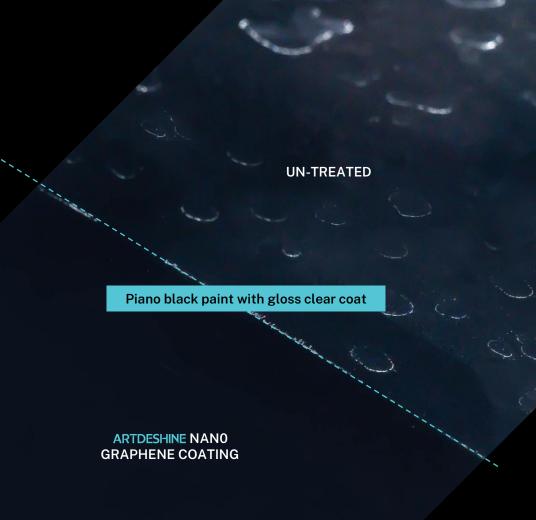
Graphene Carbon Nanotubes in our latest generation of products toughen and hardens our polymer coatings, generate anti-static properties, increases corrosion resistance and slows down UV degradation of the coating's hydrophobic properties. This combination of capabilities results in a more dirt and water repellent coating with lower chances of contaminants etching and staining, leading to significantly less observable water-spots.

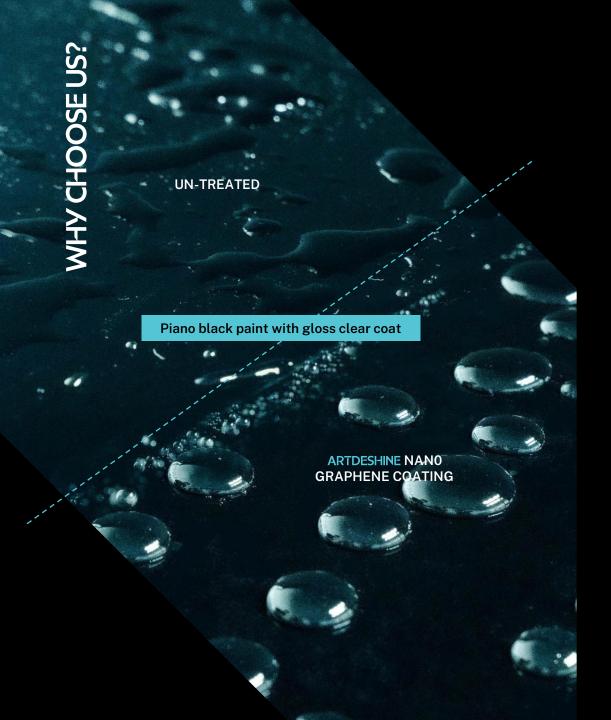
BRAND X

ARTDESHINE
HYBRID COATING

ARTDESHINE NANO
GRAPHENE COATING

White paint with gloss clear coat 2 months weathering test, no washing.





HYDROPHOBIC ANTI-STATIC REPELLENT & SLICK



Scan or press QR to see our slickness in action!

With a very hydrophobic, repellent and slick surface enabled by our coatings, liquid/contaminants are less able to stay on the surface. The surface area covered by concentration is reduced significantly. Even when contaminants react with the liquid substances and heat/UV to etch or corrode, the surface area affected is minimal.

BRAND X

ARTDESHINE
HYBRID COATING

ARTDESHINE NANO
GRAPHENE COATING

White paint with gloss clear coat Dirt Pick Up Resistant (DPUR) test according to ASTM D3719 standards.

ENHANCED GLOSS COMPATIBLE WITH PPF/VINYL WRAPS

Our coatings fill up microscopic imperfections of a surface. This enables light to reflect more, bringing to your eyes a more saturated, bolder colour and a sense of "deeper" reflection. They do not change the colours of surfaces, only to enhance or look darker in tone.

UN-TREATED

Piano black paint with gloss clear coat

ARTDESHINE NANO GRAPHENE COATING

UN-TREATED

Matte black vinyl wrap

ARTDESHINE NANO GRAPHENE COATING