# INSTALLER GUIDE **WHEEL +**

UFI: T9SD-5DM6-C00C-D0P8



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# SECTION 3: CURING

CURING TABLE	Surface	Dry		Surface I	Dry	
Environmental temperature	Above 30°C	21-29°C	15-20°C	Above 30°C	21-29°C	15-20°C
Any method with wipe off	2 hours	6 hours	12 hours	3 days	5 days	7 days
Any method with wipe off and infra-red (IR) assisted	20 min.	30 min.	40 min.	3 days	5 days	7 days
Any method with self-level	8 hours	16 hours	24 hours	3 days	5 days	7 days
Any method with self-level and IR assisted	80 min.	80 min.	80 min.	3 days	5 days	7 days

Application Methods – Artdeshine Saver Applicator, Applicator Pad, T3 Microfiber Towel, Paint Brush, Foam/Fleece Rollers, HLVP Sprayer.

IR lamp set at constant between  $40-60\,^{\circ}$ C, 1.0-1.5 metres away from surface.



Curing process will be greatly affected if environmental temperature is below 15°C.

 Use IR to speed up the process of curing and allow coating to fully cure in a climate-controlled environment.



Applied product should look like spreading liquid glue, not dripping wet.

Product will turn slightly cloudy after 15-20 seconds, depending on ambient temperatures allow product to dwell according to table below:

## **DWELL TIMETABLE**

Dwell Time (minutes)	3	5	7	9	11
Ambient Temperature (°C)	Abovo 36	30.35	25.20	20.24	15.10



Starting from the edges of applied area, wipe off excess with a clean and dry **T2 Microfiber (MF) Towel.** (grabby feeling is normal for this step)



Using another clean and dry **T2 MF Towel**, buff off all residue, hazing, high-spots and smears in circular motion.



#### SECTION 1: COATING THICKNESS



#### WARNING:

To maximise coating longevity, do not ignore optimal coating thickness, consumption, curing and dwell times.

#### COATING THICKNESS TABLE

(following Dwell Timetable in Section 4)

Average Consumption $(ml/m^2)$
2.8 - 3.0
4.3-4.5
10.3 - 10.5

- Minimum of 2 hours IR assisted before full curing process of 14 days if climatecontrolled curing is unavailable.
- Performance cannot be guaranteed if coating is left to cure at temperatures below 15°C, do this at your own risk!

Exposure before curing may result in diminished bonding, early deterioration of coating, occurrences of water-spotting, etching or corrosion

#### **SECTION 4: APPLICATION**

#### Application Tips

- Shake the bottle for at least 1 minute prior to usage.
- Remove plastic dripper insert at tip of bottle and cut off the long tip to increase flow of product or make use of pipettes.
- For first time users, create 2 test spots 30cm x 30cm each. On one spot, allow product to dwell 5 minutes before wiping. On another, allow product to dwell 15 minutes before wiping. This will help ascertain dwell time relative to the application covernment.

### **Working Area**

3

6

- Minimise levels of dust, moisture, heat and environment contaminants for maximum bonding effectiveness.
- Have sufficient lighting for better visibility of both top facing surfaces and side facing surfaces. Combination of warm (below 3000K) and cool lighting (above 4000K) will help with a proper installation.
- · Have appropriate ventilation systems to avoid inhaling of vapours/gas
- No open flames, lighted cigarettes, running ovens or heating devices (blow torches, heat guns etc.)
- Optimal surface temperature 19-30°C.
- Optimal ambient temperature 21-32°C
- · Do not apply on heated surface

4

#### SECTION 2: SURFACE COMPATIBILITY

Gloss/Matte Clear Coats	
Gloss/Matte Paints	⊘
Gloss/Matte Plastics	⊗
Gloss/Matte Vinyl Wraps, Decals, Liveries	⊗
Gloss/Matte Paint Protection Film (PPF)	<b>⊘</b>
Glass	⊗
Rubber Parts	⊘
Chrome Treated Parts	0
Raw Carbon Fibre Parts	⊘
Anodised Metal Parts	⊗
Raw Metal Parts	0
Synthetic Leather	⊗
Fabric	(May cause yellowing on white)
Natural Leather	⊗

Colour tones may deepen or darken especially on matte surfaces, matte clear coat or matte vinyl wraps. Always test a small area and inform the vehicle owner first!

May stiffen fabric.

Performance not tested for application on areas other than wheels.

Product might not bond well to certain non-clear coated metallic surfaces like chrome or anodised surfaces as these are non-stick surfaces.

Application Process:



Make all necessary preparation like compounding, polishing, claying, decontamination, washing and cleaning before application process.



Utilise **Artdeshine Prep** to remove oil, fillers and polishing compounds.



Drip required amount (refer to average coating thickness) of product by dragging tip of bottle in a straight line directly or use pipettes to drip on Artdeshine Applicator Pad or Saver Applicator.

Artdeshine T3 MF Towels are best suited for flexibility to apply onto hard-to-reach areas.



Apply onto surface no larger than half a wheel in circular and crosshatch motion for even coverage.

Last resort removal 1 hour after application can be done with **Artdeshine Prep** or IPA. After surface dry (refer to Curing Table in Section 3), any issues will have to be resolved by removal of the coating and re-applying. This can be done with a polishing machine using fine pads and compounds.

## SECTION 5: MULTIPLE COATS/LAYERING

Multiple coats are not necessary and can be a wastage of product. A maximum of 2 coats will be more than sufficient and to cover any missed-out areas and enhance coating mechanical strength.

Wheel+ is enhanced with carbon nanotubes (CNT) for dirt repelling properties, applying a top coat using a non-CNT coating might "mask" this capability. To apply multiple coats, allow surface dry (refer to Curing Table in Section 3) in between coats.

MULTIPLE COATS COMPATIBILITY TABLE



Base Coat



**Top Coat** 

8

Ayicon Pro (if on wheels)	Wheel+ (or annually as booster coat)
Hybrid+ (if on wheels)	Wheel+ (or annually as booster coat)
Wheel+	Wheel+ (or annually as booster coat)
Ayicon V4 (if on wheels)	Wheel+ (or annually as booster coat)
NGC+ (if on wheels)	Wheel+ (only annually as booster coat)
Wheel+	BX+ (only annually as booster coat)



7

Do not apply other coating, sealant, wax and spray detailer products immediately before and after application as this will affect the performance and bonding.



Check for any remaining high-spots, smearing uneven colour tones and streaking.

Ensure surface is clear with no residue



Repeat step all steps for adjacent areas. Take extra care at edges where applied and un-applied surfaces meet. Always apply and buff over the edges to ensure smooth joining.

## If using HLVP Sprayer

- Follow steps 1-2 of instructions above.
- $\cdot$  Attach 0.5mm nozzle and adjust air pressure between 2-3 bar / 29-43 psi.
- · Do not pour in more product than required into holding canister to prevent
- exposure to air and curing. Recommended 5ml per square meter.

   Point nozzle 10-15cm away from surface.
- Spray product with cross hatch strokes, across and back or up-down for at least 3 times.
- Sprayed on product should look slightly shiny and glue like wet, but not dripping and flowing.
- IF SELF-LEVELING: Keep away from dirt/dust for at least 8-24 hours, full curing occurs in 3-7 days (Refer to Curing Table). Cured coating might appear wavy or "orange-peel" like. Surface will be slightly shiny and darker in color.
- IF MANUAL LEVELING: Follow steps 6-11 of instructions above.

#### SECTION 6: COMMON ISSUES



#### Soft/Sticky Clear-Coats

- Known to "absorb" or dry out coatings quickly.
- · High spots/uneven colour tones may happen.
- Work on small areas no larger than 50cm x 50cm.
- · Reduce dwell times by at least half (refer to Dwell Timetable in Section 4)
- · Use short lint/low pile towels like Artdeshine T2 320GSM MF Towels.
- Be extra careful during wipe-off at edges of applied areas. take note to "massage" and buff more.



#### Oily Looking Smears

- High quality Artdeshine coatings are concentrated, viscous and thick, not solvent laden
- Oily looking smears may appear when coating is not dry, or dwell time is too short.
- Increase dwell times (refer to Dwell Timetable in Section 4).
- · Use short lint/low pile towels like Artdeshine T2 320GSM
- Change out to fresh towels frequently if unable to absorb.
- · Allow to dry for 30 minutes or more, coating might self-level and smears will disappear. Smears will be much easily absorbed by towel



#### High Spots/Uneven Colour Tones

- · Can happen due to soft/sticky paint causing fast drying, missed out on areas during wipe-off or on damaged matte surface/wraps.
- · Before surface dry (refer to Curing Table in Section 3), reactivate coating by applying more product and massage with slight pressure, immediately wipe-off till coating is levelled.
- · After surface dry (refer to Curing Table in Section 3), polishing or abrasive methods will have to be used to remove coating.



#### Matte surfaces/wraps

- Colour tones may deepen or darken.
- Any prior damage to surface might become more obvious after application of coating, causing uneven colour tones.
- · Matte wraps/PPF can be damaged during installation due to abrasion from squeegees used, this damage might be invisible before coating application.
- · Known to "absorb" more coating.
- · Work on small areas no larger than 50cm x 50cm.
- · Reduce dwell times by at least half (refer to Dwell Timetable in Section 4)
- · Use short lint/low pile towels like Artdeshine T2 320GSM
- · Be extra careful during wipe-off at edges of applied areas, take note to "massage" and buff more.



#### WARNING

It is not possible to rectify issues once coating is cured as these surfaces cannot be abrasively polished safely!

10

#### SECTION 7: AFTER CARE (BEFORE FULL CURING)

#### Before surface dry:

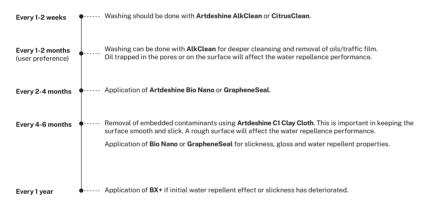
- Do not allow surface to be exposed to rain or water.
- Do not allow surface to come into contact with barsh substances. (bird droppings, plant sap, bug splatter, cleaners, shampoos etc.).
- (2) If contact occurs, gently clean with damp MF towel or soft napkin using fresh water. Wipe dry with another dry MF towel or soft napkin.

#### Before full curing:

- Do not allow surface to come into contact with harsh substances (bird droppings, plant sap, bug splatter, cleaners, shampoos etc.).
- fresh water
- ∅ If substance has dried, place slightly wet MF towel or wet napkin to soften before wiping off gently.
- with MF towel when weather permits.
- Any harsh substances or rainwater on surface exposed to sunlight and heat may cause stains, marks and spotting on uncured coating.
- ② Cleaning can be done with a damp MF towel using fresh water. Wipe and dry gently.
- ② Cleaning can also be done with Artdeshine GrapheneSeal and Bio Nano in higher dilution (1:19 for Concentrate, 1:1 for Ready to Use-RTU) with fresh water.

11

#### SECTION 8: AFTER CARE (AFTER FULL CURING)



9

#### SECTION 9: PRODUCT INCOMPATIBILITY

- O not apply any other coating, wax or sealant products unless recommended by Artdeshine as it may affect or alter the coating's performance.
- Do not use water-snot removers tar/glue removers stain removers. iron/fall-out removers, degreasers, solvent cleaners or salt removers unless recommended by Artdeshine as it may damage the coatings due to chemical incompatibility.
- ② Do not use shampoos containing polymers, waxes, silicones or those advertised to have hydrophobic properties as these may clog the coating or affect the already superb repellent performance.
- ② Use only water-based polishing pastes and compounds so that they can be thoroughly removed before application of Artdeshine coatings. Any polishing product residue left behind may interact with the coating and cause bonding, curing or application issues. Use Artdeshine Prep instead of IPA for more effective removal!

12

More information on product compatibility or other Artdeshine products for after-care is available through your distributors or contact Artdeshine directly for more information.

13

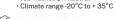
16

## SECTION 10: TECHNICAL INFORMATION

Capabilities listed are maximum approximates and based on a single coat application on automotive clear coated wheels that has been cleaned, decontaminated, polished and appropriately prepared.



#### Bonding durability (normal conditions): 2 Years 100 washes pH neutral



Bonding durability (extreme conditions): 2 Years



· Climate range -40°C to + 40°C

Hydrophobic properties durability (normal conditions): 2 Years 100 washes pH neutral 50 washes pH 3-12

Hardness (SHORE A Scale): 66 Dirt Pickup Resistance (ASTM-D3719): 52.8ΔL



Thermal threshold on treated surface (onset of degradation): 350°C

Average Water Sliding Angle on coated clear coat surface: 24.8°

Hologram (swirls) reduction during application: Micro-mesh above 7000

· FEPA sandpaper grade above P5000

## STORAGE

This serves as basic and commonly needed information for safe handling and use of products. Material Safety Data Sheet ilable upon request for more specific information

## Shelf-life:

14

- 2 years unopened
- 6 months after unscrewing cap

- Storage environment:
   Below 30°C ambient temperature or gelation may occur.

  Keep containers securely sealed.

  Store in a cool, dry, well-ventilated area.

  Segregate from alcohol, water.
- · No smoking, naked lights, heat or ignition
- Do NOT store near acids, or oxidising

## WARNING DANGER.

## Hazard Statements:

H302: Harmful if swallowed. H304: May be fatal if swallowed and enters H314: Causes severe skin burns and eve

Precautionary Statements
P260: Do not breathe mist/vapours/spray. P264: Wash all exposed external body areas

P204: Wash all exposed external body areas after handling. P280: Wear protective gloves, protective clothing, eye protection and face protection. P301+P310+P330+P331: IF SWALLOWED: Immediately call a POISON CENTER/doctor/ first aider. Rinse mouth and do NOT induce vomiting. If more than 15 mins from Doctor, INDUCE VOMITING (if conscious). P303+P361+P353; IF ON SKIN (or hair); move contaminated clothing. Rinse skin with water. P405: Store locked up.

P501: Dispose of containers/content to authorised hazardous or special waste collection points in accordance with local regulations





Scan OR to watch application.



Scan OR to watch HLVP spray application

15