



Leather & Plastic Coating

Technical Specifications

Main ingredients (General terms): Polydimethylsiloxane (PDMS), Siloxane Surfactants, Aliphatic Hydrocarbon Solvent

None of the materials listed in this product are considered carcinogens in NTP, IARC or OSHA. Material Safety Data Sheet available upon request for more specific information on composition.

Solubility with water (in bottle): Not miscible

Appearance and odour (in bottle): Clear solution, non-pungent odour

Capabilities listed are maximum approximates and based on a single coat application on automotive leather/PVC upholstery and matte plastic trim that has been cleaned, decontaminated and appropriately prepared. More information for preferred after-care to maximise durability available.

Bonding durability (normal conditions): 1 Year

- 60 washes pH neutral
- Climate range -20°C to + 35°C

Bonding durability (extreme conditions): N/A

- Climate range -40°C to + 40°C
- 30 washes pH >12

Hydrophobic properties durability (normal conditions): 1 Year

- 60 washes pH neutral
- 30 washes pH >12

Bonding durability (Leather & PVC upholstery): 1 Year

- 20 washes pH neutral fine bristles/sponge

Durability will be affected if cleaning method utilises harsh bristles.

Average coating thickness: 0.3 – 0.5 µm (micrometre/micron)

Coating thickness effectiveness range: 0.2 – 0.4 µm (micrometre/micron)

Surface suitability: All automotive interior upholstery (leather/PVC), all materials of interior fittings, matte/gloss plastic trims and fittings (exterior)

Chemical resistance: < pH12, > pH 5

Thermal threshold on treated surface (onset of degradation): 300°C

Liquid substance repellence of treated surface:

- Distilled water droplet average contact angle – 100-110°
- Vegetable oil droplet average contact angle – 70-80°

Hologram (swirls) reduction during application:

- Micro-mesh >7000
- FEPA sandpaper grade >P5000



Abrasion resistance: N/A

Force of friction on treated surface (matte plastic trims): $F = 0.045\text{N}$ (0.006g foam applicator block sliding off treated surface)

- Coefficient of static friction $\mu = 1.0$
(based on inclination 45° when applicator block starts sliding off)
- Normal force $N = 0.045\text{N}$
(based on inclination 45° when applicator block starts sliding off)

Consumption rate: 4-6 ml/m² or 30ml per mid-sized sedan interior

Curing time (recommended):
Infrared assisted 40-50°C

5 hours or 2 hours infrared assisted - Surface dry (unaffected contact with water/rain)
7 days or 24 hours infrared assisted - Full curing

7 days (tropical/humid) / 14 days (temperate/dry) with or without infrared assisted curing

- Unaffected contact with cleaning solutions
- Unaffected contact with contaminants (tree-sap/bird droppings etc.)
- Exposure to harsh environmental conditions

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

Appearance after curing: Optically transparent, darker colour tones for matte trims and increased reflectivity/gloss.

Solvent incompatibility:

N-Methylpyrrolidone (NMP), Tetrahydrofuran (THF), Chloroform, Ether.
(the use of products containing these solvents during application causes swelling/gelation)

Products containing solvents such as acetone, 1-propanol, methanol, water, 2-propanol (IPA) in small amounts can be used with no significant impact.
(Contact Artdeshine to find out about product compatibility.)

Application

Before application of Wheel Coating product, ensure surface is stripped of all existing products (waxes, sealants and spray detailers etc.).

Working area should

- 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 (<3000K) and cool lighting (>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.)

Do not apply product under direct sunlight or a heated surface.

- Optimal surface temperature < 25°C.
- Optimal ambient temperatures < 32°C



If natural sedimentation occurs, shake the bottle well to evenly disperse the product.

1. Make all necessary preparation like polishing, claying, decontamination, washing and cleaning before application process.
2. Utilise panel wipes, isopropyl alcohol (IPA), silicone removers to remove oil, fillers and polishing compounds. (e.g. Artdeshine Silicone Remover)
3. Drip 6-10 (12-18 if priming applicator) drops of product by dragging tip of bottle in a straight line to and fro on any suede, microfiber applicator block or pads or small MF towel.

Using lower grams per square metre (gsm) small microfiber towels are best suited for flexibility to access hard to reach areas.

4. Apply onto surface no larger than half a seat in circular motion and cross-hatch motion for even coverage.
5. Applied product should look like spreading liquid glue, not dripping wet.
6. Wait 15-20 seconds.
7. Starting from the edges of applied area, wipe off excess with a clean and dry microfiber (MF) towel. (grabby feeling MF towel is normal for this step)
8. Using another clean and dry MF towel, buff off all residue, hazing, high-spots and smears in circular motion.
9. Ensure surface is clear and surface feels slick. (smoothness can be felt when buffing with MF towel)
10. Repeat 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.

Multiple coats is 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 during application. Leather & Plastic Coating is formulated to be highly repellent and additional coats will be repelled and not have effective bonding nor will it increased durability and protection.

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

Any issues should be resolved using above methods in the first 15 minutes after application as the coating will not have started curing.

Last resort removal 1 hour after application can be done with Artdeshine Silicone Remover or any panel wipes and IPA.

After 24 hours, 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, or fine abrasive sponge and bristles with high pH shampoo for upholstery and matte plastic trims.



Recommended After-Care (Before Full Curing)

Before 2 hours (infrared assisted) or 5 hours:

- Do not allow surface to be exposed to rain or water.
- Do not allow surface to come into contact with harsh substances (bird droppings, plant sap, bug splatter, cleaners, shampoos etc.).
- 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 7 days (tropical/humid) / 14 days (temperate/dry) with or without infrared assisted curing:

- Do not allow surface to come into contact with harsh substances (bird droppings, plant sap, bug splatter, cleaners, shampoos etc.).
- If contact occurs, wipe gently with damp MF towel or soft napkin using fresh water. If substance has dried, place slightly wet MF towel or wet napkin to soften before wiping off gently.
- Exposure to rainwater will not affect curing process.
- However, ensure that rainwater is not on the surface for prolonged periods by drying 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.
- Cleaning can be done with a damp MF towel using fresh water. Wipe and dry gently.
- Cleaning can also be done with Artdeshine Graphene Detailer and Bio Nano Pro or any water soluble spray detailers in higher dilution with fresh water.

Recommended After-Care (After Full Curing)

Every 1-2 weeks (exterior only):

- Washing should be done with pH neutral shampoo. (e.g. Artdeshine Organic Cleaner or Citrus Cleaner)

Every 1-2 months (exterior only):

- Washing can be done with Alkali shampoo (e.g. Artdeshine Organic Cleaner) no more than pH 12 for deeper cleansing and removal of oils/traffic film. Oil trapped in the pores or on the surface will affect the water repellence performance.

Every 2-4 months (exterior only):

- Application of water soluble spray detailers. (e.g. Artdeshine Bio Nano Pro or Graphene Detailer)

Every 4-6 months (exterior only):

- Removal of embedded contaminants using fine grade clay bars or cloth. This is important in keeping the surface smooth and slick. A rough surface will affect the water repellence performance.
- Application of Graphene Maintenance Coating or water soluble spray detailers. (e.g. Artdeshine Bio Nano Pro or Graphene Detailer)
- Application of Artdeshine RX Coating for better water repellent effect and self-cleaning properties
- Application of Artdeshine Ceramic Paste for slickness



Every 4 months (interior only)

- Clean leather & upholstery with clean water and pH neutral shampoo (e.g. Artdeshine Organic Cleaner or Citrus Cleaner) using fine brush/sponge.
- Wipe interior fittings with wet MF towel and diluted pH neutral shampoo.
- Application of water soluble spray detailers. (e.g. Artdeshine Bio Nano Pro or Graphene Detailer is safe for interior use)

Do not apply any other coating, wax or sealant products as additional or top coats unless recommended by Artdeshine as it may affect or alter the performance of Leather & Plastic Coating. Water soluble products like spray detailers are milder and more suitable. More information on product compatibility or other Artdeshine products for after-care is available through your distributors or contact Artdeshine directly for more information

Storage and Warnings

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

Shelf-life:

- 2 years unopened
- 6 months after unscrewing cap

Storage environment:

- < 30°C ambient temperature
- Cool and dry storage
- Do not store under direct sunlight
- Product is heat sensitive and gelation may occur if exposed to heat
- Do not store near open flames, ovens, heaters or flammable items

Sedimentation:

- May occur if stored still for more than 1 month
- Shake well until product is evenly dispersed or before use
- Always uncap carefully to release gas build-up after shaking bottle

Keep out of reach from children.

Always wear solvent resistant gloves when using. (Face and eye protection recommended)

Harmful if swallowed or ingested.

Irritant to eyes if contacted.

May cause skin irritation with prolonged un-protected use.

If swallowed: Rinse mouth. Do not induce vomiting. Call a doctor/physician.

If on skin . Rinse skin with soap and water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If inhaled: Move to well ventilated fresh air.

Warning symbols:

Do not inhale vapour and gas of product.

Use in well ventilated areas.



Flash Point : 85°C

Extinguishing Media : Water, dry extinguishing material

Special Fire Fighting Procedures : Normal caution when dealing with chemicals

Unusual Fire and Explosion Hazards : None