

INSTALLER GUIDE **REPEL SPRAY COATING**

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Chemical resistance: nH4-nH12

Thermal threshold on treated surface (onset of degradation): 200°C

Liquid substance repellence of treated surface

- Distilled water droplet average contact angle 110-120°
- Vegetable oil droplet average contact angle 80-90⁶

Average Water Sliding Angle on coated clear coat surface: 24.5°

Consumption rate: 3-5 ml/m2 for 0.5-1 µm thick ((200ml covers approx. 60 m2)

Curing time (recommended):

1 hour (tropical/humid) / 3 hours (temperate/dry) or 20 minutes Infrared lamp assisted

· Surface dry (unaffected contact with water/rain)

2 days (tropical/humid) / 4 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 staining, loss of coating, water-spotting, etching or corrosion)

Appearance after curing: Optically transparent, visibly increased reflectivity

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.)



Repel Spray Coating

Technical Specifications

Contains ingredients (General terms): naphtha petroleum, polydimethylsiloxane, bis[3-(triethoxylsilyl)propyl]amine

Solubility with water (in bottle): Not miscible

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

Capabilities listed are maximum approximates and based on a single coat application on painted aluminium plate with polyurethane clear coat that has been cleaned, decontaminated, clayed and appropriately prepared. More information for preferred after-care to maximise durability available.

Bonding durability (normal conditions): 1 Year

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

Bonding durability (extreme conditions): 1 Year

- 20 washes pH 4>12 Climate range -40°C to + 40°C

Hydrophobic properties durability (normal conditions): 1 Year

- 50 washes pH neutral 20 washes pH 4>12
- Average coating thickness (2-3 ml/m² with 10 minutes dwell time): 0.5-1 µm (micrometre/micron)

Hardness (SHORE A Scale): 31

Surface suitability: All materials and surfaces (fabric might harden, stiffen or turn vellow)

(Product does not bond well to certain chrome or anodised surfaces as these are made to be non-stick)

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Application

Before application of product, ensure surface is stripped of all contaminants, this includes other coatings or cleaning agents.

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.)
- Optimal surface temperature < 25°C. Maximum < 50°C
- Optimal ambient temperatures < 32°C

If natural sedimentation occurs, shake the bottle well to evenly disperse the product and wait 1 minute before unscrewing cap slowly to release gas build-up

- 1. Make all necessary preparation like compounding, sanding, polishing, scrubbing, claying, decontamination, washing and cleaning before application process
- 2. Utilise solvent wipes, isopropyl alcohol (IPA), silicone removers to remove oil, fillers and polishing compounds, (e.g. Artdeshine Prep or Artdeshine X Strip)
- 3. IF SURFACE IS FABRIC: Spray product directly on surface, wait 5 to 15 minutes maximum and wipe with T3 microfiber (MF) towel included.
- 4. IF SURFACE IS NOT FABRIC: Spray product 4-5 times on T3 MF towel included. (Artdeshine T2/T3 Towels recommended).

(Continue following steps for NON-FABRIC)

- 5. Apply onto surface no larger than 1.0m x 1.0m (4-5 sprays) in circular motion for even coverage.
- 6. Applied product should look like spreading liquid glue, not dripping wet.
- 7. Product will turn slightly cloudy after 15-20 seconds, wait at least 5 minutes up to a maximum of 15 minutes or less depending on ambient temperatures.
- 8. Starting from the edges of applied area, wipe off excess with same MF towel. (grabby feeling MF towel is normal for this step)

- 9. Using another clean and dry MF towel, buff off all residue, hazing, high-spots and smears in circular motion.
- 10. Check for any remaining high-spots, smearing, uneven colour tones and streaking.
- 11. Ensure surface is clear and surface feels slick. (smoothness can be felt when buffing with MF towel)
- 12. 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.

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 and enhance coating mechanical strength.

To apply multiple coats, allow 1 hour (warm weather) or 3 hours (cooler weather) in between coats.

Do not apply other products immediately 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 $\mathsf{Prep}/\mathsf{Strip}$ or any solvent wipes and IPA.

After 24 hours, any issues will have to be resolved by removal of the coating and re-applying. This can only be done with abrasive polishing/sanding.

Recommended After-Care (Before Full Curing)

Before 0.5 hour (infrared assisted) or 1 hour:

- 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 4 days 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.).
- No smoking, naked lights, heat or ignition sources.
- Do NOT store near acids, or oxidising agents.

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

DANGER.

Hazard Statements:

- H304: May be fatal if swallowed and enters airways.
- H336: May cause drowsiness or dizziness.

H314: Causes severe skin burns and eye damage.

EUH066: Repeated exposure may cause skin dryness or cracking.

Precautionary Statements

P260: Do not breathe mist/vapours/spray.

P264: Wash all exposed external body areas after handling. P271: Use only outdoors or in well-ventilated areas.

P301+P310+P330+P331: IF SWALLOWED: Immediately call a POISON CENTER/

doctor/first-aider. Rinse mouth, do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Remove contaminated clothing. Rinse skin with water.

P405: Store locked up

P403+P233: Store in a well-ventilated place. Keep containers tightly closed. P501: Dispose of containers/content to authorised hazardous or special waste collection points in accordance with local regulations.

- 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 $\ensuremath{\mathsf{MF}}$ towel using fresh water. Wipe and dry gently.

Recommended After-Care (After Full Curing)

Every 1-2 weeks:

- Wipe dirt or stains on surface with damp MF towel.
- Shampoo used for washing should be pH neutral or compatible shampoo. (e.g. Artdeshine AlkClean / CitrusClean / Artdeshine X Cleanse)
- Washing or cleaning should be done using soft wash mitts, soft sponges or MF towels.
- No abrasive/rough sponges and materials, hard bristles or brushes should be used or coating will be removed.

Storage and Warning

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
 - Always flush spray nozzle after use (with ADS X Strip if available)
 - Do not leave spray nozzle in bottle after use
- Use only provided cap to keep bottle tightly closed
- Turn spray nozzle tip adjuster while squeezing trigger if choked

Storage environment:

- < 30°C ambient temperature or gelation may occur.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Segregate from alcohol, water.

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MAY CAUSE YELLOWING ON WHITE FABRIC. MAY STIFFEN FABRIC. DO NOT APPLY ON SURFACES THAT REQUIRE GRIP! PRODUCT REDUCES FRICTION!



Scan QR to watch application.



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