



## Resin - Care and Maintenance

### Sensitile's<sup>®</sup> Resin Products

Sensitile's<sup>®</sup> Resin products, including Scintilla<sup>®</sup>, Jali<sup>®</sup>, Slant<sup>®</sup>, Lumina<sup>™</sup>, Infinity<sup>™</sup>, Celeste<sup>™</sup>, Vapor<sup>™</sup>, Spark<sup>™</sup>, Ripple<sup>™</sup>, Context<sup>™</sup> and Motif<sup>™</sup> panels are crafted with state-of-the-art materials and processes. They are composed of the best weathering and most durable polymers, with not only impressive mechanical and physical properties, but also a minimized environmental impact through maximized recycled content. The optical grade resins we use are much clearer than even low-iron glass with over 90% light transmission. Due to their toughness and UV stability, these are the same resins that are used in airplane windows, hockey rinks and other demanding applications. With proper care and maintenance, the original beauty, luster, and luminosity of these signature materials can be maintained even in very high-use commercial spaces.

We recommend reading through this document in its entirety before proceeding.

### Cleaning and Care

#### Regular Cleaning:

Our Resin materials are composed of tough and resilient optical-grade resins into which an internal texturing is integrated. Since the texture is on the inside, the faces and backs of the materials are smooth, non-staining and easy to clean. The eye-catching textures also draw the viewer deeper into the product, helping to minimize the appearance of surface dust, debris and light scratching.

#### Cleaning Products to Use:

For initial and regular cleaning we recommend wiping with an anti-static plastic cleaner like Novus #1 using a clean microfiber or other non-linting soft cloth; this will clean the surface while also neutralizing any static on the surface which may otherwise attract dust. Other recommended cleaners are Sparkle Glass Cleaner, Brilliance Plastic Cleaner, Acrifix



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Cleaner, and Plexus Cleaner, all of which are specially designed to treat clear resin surfaces. In many cases, a microfiber cloth dampened with clean warm soapy water and a small amount of mild, non-streaking dish soap or detergent will also suffice for regular cleaning. For many interior vertical applications, a periodic dusting is all that is required. In such cases, a dusting wand like a Swiffer duster or microfiber (feather-free) hand duster can also be used.

Resin products should NEVER be cleaned with solvents, alcohols, highly alkaline cleaners, or strong chemicals or abrasives. This includes many popular cleaners like Windex, Ajax, and 409, which are designed for glass and not resin surfaces. The use of unapproved cleaners/solvents or alcohol can cause permanent damage to resin products and will void the product warranty.

### **Cleaning Methods to Use:**

After initial installation, always leave the original protective masking film on the product for as long as possible, especially during the construction process, to protect the surface from damage caused by construction dust and debris.

For the first cleaning of any installation, an anti-static cleaning product like Novus #1 (or one of the above specified cleaners) should be used; this will not only clean the surface but also impart a dust repellent quality to the surface which reduces the frequency of future cleanings. Anti-static cleaners such as this can also be used for ongoing cleaning.

We always recommend using a damp cleaning cloth (microfiber or lint-free soft rag); this will ensure that surface dust is picked-up rather than rubbed into the surface. We do NOT recommend dry wiping of the surface with a cloth or rag.

For dry dusting, use a microfiber duster or “Swiffer” type dusting wand.

For regular cleaning, we recommend spraying the cleaning agent on the wiper (microfiber cloth) rather than spraying the product directly. However, if there is any dried residue to remove, then spraying that area of the panel and allowing it to stay wet will help to dissolve it. When using this method,



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we suggest protecting the edges so that they do not get wet with the cleaning agents.

The microfiber wiper or cleaning cloth should be damp and never wet. Cleaning agents or liquids should NOT be allowed to pool on or run down the material.

We do NOT recommend using paper towels or any type of abrasive cleaning pad such as a kitchen scouring pad, as they can leave fine scratches which, over time, can dull the surface. **Exception:** see below for surfaces with a Renewable Matte finish.

Our Resin materials are layered and their edges are not the same as the faces; they may have a porous edge that will need special attention when cleaning. For installations that may frequently come into contact with liquids, we do recommend either sealing that edge (either during manufacture, or refer to **Resin Products - Fabrication Guidelines** for instructions) or capturing the edge in a channel.

For installations that do not have sealed edges and where these edges may be exposed or captured, it is important not to get these edges wet when cleaning and wiping the products.

For restoring light surface scratches, please see separate section below.

### **Sanitizing and Disinfecting:**

To sanitize and disinfect our Resin products we recommend occasional wiping using a solution of household bleach (Sodium Hypochlorite) as diluted (5 tablespoons per 1 gallon, as recommended by the Centers for Disease Control for disinfection of surfaces). Please also follow established guidelines regarding how long the product must be left on the surface to be effective before wiping off. Be sure to follow all the other guidelines noted above, as well as the bleach manufacturer's use and safety instructions.

### **Special Considerations:**

**Renewable Matte Finish** – is usually specified/recommended for high-use horizontal installations. The surface of the material, in this case, is pre-sanded with a fine (400-grit) finish especially developed for bar-tops,

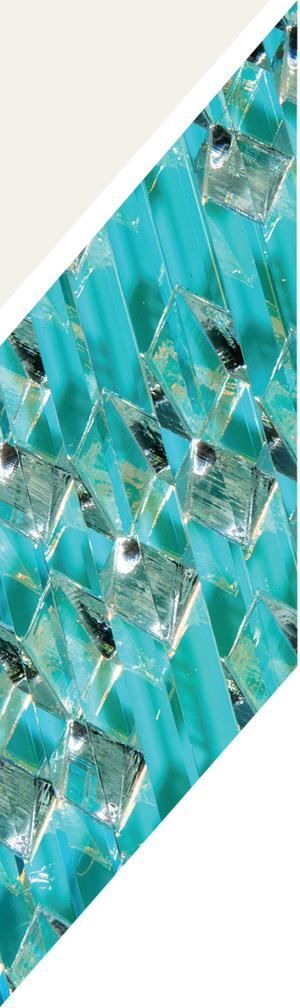


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table-tops, transaction-tops, counters, and other high-use work surfaces. Clean matte-finish products using the products and methods listed above. However, if regular cleaning does not remove any and all marks left on the surface, they may also be wiped down and then lightly buffed with a 3M green scrubbing sponge (or scouring pad) as part of the regular maintenance routine. If deeper scratches or nicks are sustained on the surface, then a spot treatment can also be done with 400-grit sandpaper. Use a circular motion and light pressure with the 400-grit sandpaper and reduce pressure as you get to the edges of the newly sanded spot versus original finish to blend/feather the newly sanded spot. Alternatively, a random orbital palm sander can also be used. After sanding, a 3M Scotchbrite scrubbing sponge can be used on the area to blend everything in. Please note that the renewable matte finish is distinct from the frosted, non-glare and/or etched finishes, which are not designed to be sanded or treated with abrasive pads as part of an upkeep process.

**Reflective Finishes** – Sensitile’s Infinity™, Celeste™ and Vapor™ lines of Resin Panels often have a reflective finish on their front and/or back surface which helps them achieve their special optical effects. This finish, due to its mirror-like appearance (especially when unlit), allows fine scratches to be more easily visible than other types. To help protect this custom finish, the reflective surfaces are protected with a special Abrasion Resistant (AR) coating that is applied to the product at the factory. These types of surfaces will require special care and attention; while the AR coating will protect them from minor scratches, heavier abrasion can still mar the surface. For the periodic cleaning and care of these products we recommend using a dry duster as described above, supplemented with occasional damp wiping.

**Service Temperature** – Our Resin products have a maximum service temperature of 175° F; exposure to temperatures higher than this may locally distort the resin or produce other physical harm. We always recommend using coasters, trivets, or other protection from hot items that will come in contact with the material. We do not recommend using our Resin products in areas where they will be in close proximity to an open flame.



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**Special Cleaning/Removal** - If stubborn residue is adhered to the panel, (paint overspray, labels, adhesive residue, etc.), we recommend soaking for a couple of hours with warm water mixed with a mild detergent. If the affected area does not respond, then a small amount of mild trisodium phosphate solution, kerosene, or 100% mineral spirits sparingly dabbed into a soft rag can be used. These are the only three cleaning chemicals that can be safely used, and only in these special circumstances. Note: some hardware store brands of mineral spirits and kerosene may contain other chemicals - please read the SDS or ingredient list on these before using and perform a small test on a scrap panel. These special cleaning agents should never be allowed to come in contact with the edges of the panels and they should always be applied to a rag before applying to the panel; they should never be sprayed or poured directly on the panel and their contact time with material should also be minimized. When using these materials, please follow all manufacturers' instructions regarding safety. After the stubborn residue is removed, a final cleaning step should always be performed using Novus #1, Brilliance, or soap and water, to remove any remaining cleaning agent residue.

**Surface Preparation for Bonding, Edge Sealing Etc** - If the Resin Panel is to be fabricated and its surfaces need to be prepared for bonding or edge sealing, or if protective masking tape or surface protection tape will be applied to the panels, then anti-static cleaners like Novus #1 should not be used as they may interfere with proper adhesion. Instead, use Sparkle Glass Cleaner or mild soap and water. Note: any and all fabrication must be in accordance with **Sensitile's® Resin Products - Fabrication Guidelines.**



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# Maintenance and Minor Repairs

**Restoring Fine Scratches** - All of our Resin Panels (some exceptions noted below) use a hard resin that is easily restored to its original luster with hand polishing (using the Novus 3, 2, 1 system) or by using a buffing/polishing tool (such as used in automotive detailing and waxing) in conjunction with the Novus polishing compounds. Before starting, we recommend masking around the area to be worked with removable blue painters tape. If the area to be worked on is near an edge, it is imperative to protect the edge with blue tape as well. When hand polishing we suggest following the scratch in a back-and-forth motion (for a longer scratch) or going into a round figure-8 type motion (for a larger dull area of small scratches). Novus is a three-step process, using three liquids - Step 3 (most aggressive/micro-abrasive based white liquid), Step 2 (medium aggressive/brown liquid) and Step 1 (cleaner and anti-static). Depending on the depth of the scratch, the process is started either with Step 3 (for the deeper scratches) or with Step 2 (for finer scratches), and then finished off with Step 1 (the final cleaner with anti-static properties). For larger areas, a handheld power buffer with a high density foam pad can be used. Please contact us for a video of this process.

**Restoring Deep Scratches and Chips or Nicks** - Deeper scratches can also usually be restored by following the same process as outlined above for fine scratches; the difference is the additional steps of sanding to prepare the area. For addressing deep scratches and/or nicks and chips, please contact us at [production@sensitile.com](mailto:production@sensitile.com) and send us some images of the issue so we can advise on the feasibility and best methodology for success.

**Edge-Sealing** - Applications in wet areas where the resin panels will be exposed to liquids, including water, require treatments like edge sealing to protect the porous edges from infiltration. For more information on available factory-applied edge treatments, please refer to **Resin - Edge Profiles**. For edge-sealing instructions, please refer to **Resin Products - Fabrication Guidelines**.

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### Care Do's

- ✔ Train any staff and/or users on these care instructions.
- ✔ Leave the protective masking on the product until it is ready to use.
- ✔ Wipe off and remove any spills right away.
- ✔ Use pads under the feet of any equipment that may be on the surface.
- ✔ Use approved anti-static cleaners like Novus# 1 for regular cleaning.
- ✔ Use a microfiber or soft non-linting cloth to clean and wipe.
- ✔ Use a Swiffer-type duster for dry dusting.
- ✔ Read these instructions entirely and store them for future reference.

### Care Do Not's

- ✘ Drag heavy or sharp objects on the surface.
- ✘ Use alcohols, solvents, highly alkaline cleaners, or other strong chemicals for cleaning.
- ✘ Bring into contact with high heat or open flames.
- ✘ Wipe with abrasive products like paper towels or kitchen scrubbing pads.



## Resin - Care and Maintenance

# Stains and Chemical Resistance for Resin Products

Resin products can be damaged when exposed to certain substances. A reference chart for some common (and uncommon) products is provided below - if in doubt always perform a wipe or dip test on a scrap or cut-off.

Beverages, household items, and common liquids:	Resistant
Beer and wine -	✓
Black Crayon and shoe polish (may need cleaning agents per above)	✓
Lipstick (may need cleaning agents per above)	✓
Hair Dye (may need cleaning agents per above)	✓
Iodine solution	✓
Camomile extract	✓
Chocolate	✓
Coffee, tea	✓
Fruit juice, milk	✓
Nail polish	✗
Nail polish remover	✗
Peat water	✓
Sea water	✓
Soaps	✓
Spirits, to 30%	✓
Spirits above 60%	✗
Urine	✓



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Beverages, household items, and common liquids	Resistant
Vinegar	✓
Water, mineral water	✓
Kerosene	✓

Food and spices	Resistant
Aniseed, bay, nutmeg	✓
Cloves	✗
Coffee beans - flavored	✗
Coffee beans - pure	✓
Honey	✓
Ice cream	✓
Marinades	✓
Meat and fish	✓
Pepper, cinnamon, onions	✓
Salt	✓

Disinfectants	Resistant
Aqueous Hypochlorite	✓
Bleaching powder, 5%	✓
Carbolic acid	✗
Hydrogen peroxide upto 40%	✓
Lugol solution	✓
Mercuric chloride	✓



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Building Materials and related	Resistant
Bituminous emulsion	✗
Cement	✓
Hot bitumen	✗
Mortar	✓
Plaster of Paris	✓
Red Lead	✓

Chemicals and Solvents	Resistant
Acetic acid, glacial	✗
Acetic Acid - to 25%	✗
Acetic acid- 5% (Vinegar)	✓
Acetone	✗
Alum	✓
Aluminum chloride	✓
Aluminum oxalate	✓
Ammonia, aqueous solution	✓
Ammonium sulphate	✗
Amyl acetate	✗
Arsenic	✓
Arsenic acid	✓
Battery acid	✓
Benzaldehyde	✗
Benzene	✗
Bromine	✗
Butanol	✓ (limited)

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Chemicals and Solvents	Resistant
Butyl lactate	✗
Butyric acid, to 5%	✓
Calcium chloride	✓
Chlorine water	✓ (limited)
Chlorine, liquid	✗
Chlorinated hydrocarbons	✗
Carbon disulphide	✗
Calcium hypochlorite	✓
Calcium chloride	✓
Chlorophenol	✗
Chromic acid	✗
Citric acid, to 20%	✓
Cresol	✗
Cyclohexane	✓
Diacetone alcohol	✗
Diamyl phthalate	✗
Dibutyl phthalate	✗
Diethylene glycol	✓
Dioxane	✗
Ether	✗
Ethyl acetate	✗
Ethyl alcohol, to 15%	✓
Ethyl alcohol, 15-30%	✗
Ethyl alcohol, above 30%	✗



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Chemicals and Solvents	Resistant
Ethyl bromide	✗
Ethyl butyrate	✗
Ethylene bromide	✗
Ferric chloride	✓
Ferrous chloride	✓
Ferrous sulphate	✓
Formic acid, to 2%	✓
Formic acid, to 40%	✗
Glycerol	✓
Glycol	✓
Heptane	✓
Hexane	✓
Hydrochloric acid	✓
Hydrofluoric acid, to 20%	✓
Hydrogen peroxide, to 40%	✓
Hydrogen peroxide, over 40%	✗
Isopropyl alcohol, to 50%	✗
Lactic acid, to 80%	✗
Magnesium chloride	✓
Magnesium sulphate	✓
Manganese sulphate	✓
Mercury	✓
Methanol, absolute	✓
Motor fuel, with benzene	✓

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Chemicals and Solvents	Resistant
Nickel sulphate	✓
Nitric acid, to 20%	✓
Nitric acid, 20-70%	✓
Nitric acid, over 70%	✓
Oxalic acid	✓
Paraffin	✗
Perchloroethylene	✓
Petroleum ether	✓
Phenols	✗
Phosphoric acid, to 10%	✓
Phosphorus	✗
Phosphorus trichloride	✗
Picric acid, 1% in water	✓
Potassium carbonate	✓
Potassium chloride	✓
Potassium cyanide	✓
Potassium dichromate	✓
Potassium hydroxide	✓
Potassium nitrate	✓
Potassium permanganate	✓
Silicon tetrachloride	✗
Silver nitrate	✓
Soap solution	✓
Soda	✓



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Chemicals and Solvents	Resistant
Sodium bisulphite	✓
Sodium carbonate	✓
Sodium chlorate	✓
Sodium chloride	✓
Sodium hydroxide	✓
Sodium hypochlorite	✓
Sodium sulphate	✓
Sodium sulphide	✓
Stearic acid	✓
Sulphur	✓
Sulphur dioxide, liquid	✗
Sulphuric acid, to 30%	✓
Sulphurous acid, conc.	✗
Sulphurous acid, to 5%	✓
Sulphuryl chloride	✓
Tartaric acid, to 50%	✗
Thionyl chloride	✗
Toluene	✗
Triethylamine	✓
Trichloroacetic acid	✗
Tricresyl phosphate	✓
Turpentine	✗
Turpentine substitute	✗



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Chemicals and Solvents	Resistant
Urea, to 20%	✓
Xylene	✗
Zinc sulphate, aqueous	✗
Zinc sulphate, solid	✓

Gases and Vapors	Resistant
Ammonia - resistant	✓
Bromine vapor (dry)	✗
Carbon dioxide	✓
Carbon monoxide	✓
Chloride vapor (dry)	✗
Exhaust gases, containing HCl	✓
Exhaust gases, containing HF	✓
Exhaust gases, containing H <sub>2</sub> SO <sub>4</sub>	✓
Hydrogen sulphide	✓
Methane	✓
Nitric oxide	✓
Oxygen	✓
Ozone	✓
Sulphur dioxide (dry)	✓
Natural gas (butane)	✓



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Beverages and Liquids	Resistant
Pesticides: Aqueous solution of pesticides	✗
Protective coatings: Grip Mask	✓
Protective coatings: Sign Strip	✗

## Contact

For further information or for any special conditions and questions, please do not hesitate to contact us via phone +1.313.872.6314 or email [info@sensitile.com](mailto:info@sensitile.com).

\*A 2 oz kit of the Novus three-part system may be purchased directly from Sensitile®.

**Note:** All documents and instruction guides referred can be found on our website. Scroll to the Resin section of: <https://www.sensitile.com/support-care/documentation>.