

PRODUCT DESCRIPTION

SIMIRON Casting Resin is a professional-grade, high-performance, ultra-clear, self-leveling, and high-gloss 100% solids deep-casting epoxy resin coating designed to be poured or cast up to 2-inches thick. **SIMIRON Casting Resin** is great for river tables, live edge tables and countertops, bar tops, wood finishes, artwork and other creative applications. For a truly custom appearance, **SIMIRON Table Top Epoxy** can be mixed with pigment and mica powders, glitter, glow-in-the-dark pigments, alcohol inks, resin dyes and tints. **SIMIRON Casting Resin** can be poured up to 2-inches thick with excellent air release, making it simple to achieve flawless results. It has an easy-to-use 2:1 mix ratio.

FEATURES & BENEFITS

- Self-Leveling
- Deep 2" Pours
- Crystal Clear
- Excellent Air Release
- Easy-To-Use
- 100% Solids
- No VOC's
- Safe For Incidental Food Contact
- No Odor
- Scratch and Impact Resistant
- UV Resistant
- Extremely Durable
- High Gloss
- Blush Resistant
- Water Resistant

RECOMMENDED USES

- River Tables
- Encasing documents
- Crafts and Hobbies
- Collectible and model making

TECHNICAL DATA

PHYSICAL DATA	
Finish	High Gloss
Resin Type	Epoxy
Max Pour Depth	2"
Hardness Shore D	85
Cure Time	72 hours
Mix Ratio (by volume)	2:1
Mix Ratio (by weight)	100A:40B
Pot Life	300 min
Mixed Viscosity	700 cPs
Volume Solids	100%

PHYSICAL DATA	
Weight Solids	100%
VOC	0 g/L
UV Resistant	Excellent
Blush Resistant	Excellent
Air Release	Excellent
Scratch Resistance	Excellent
Self-Leveling	Excellent
Impact Resistant	Excellent
Clarity	Excellent

THEORETICAL COVERAGE

DEPTH	COVERAGE	DEPTH	COVERAGE
1/8"	12.8 sq. ft/gal	1"	1.6 sq. ft/gal
1/4"	6.4 sq. ft/gal	1.5"	1 sq. ft/gal
1/2"	3.2 sq. ft/gal	2"	0.8 sq. ft/gal
3/4"	2.1 sq. ft/gal		

SURFACE PREPARATION

Surface should be clean and dry. Casting epoxy, molds, and items to be cast should all be at the same temperature. If using wood, it should be clean and dry and free of excessive internal moisture. Properly cover or mask surrounding areas to protect from spilled or dripped epoxy.

MIXING

Mixing: For best results product should be used at 75-80°F. Combine the Part A Resin and Part B Hardener in a clean container, at the proper 2 to 1 mix ratio by volume. It is very important the proper mix ratio is followed. Mixing a different ratio could cause product to not cure properly and lead to tacky areas or product failure. Mix product using a clean mixer or stick for 3 - 5 minutes. Be sure to mix gently so that excessive air isn't incorporated during mixing. Mixing too aggressively can lead to a cloudy appearance as well as surface imperfections. Transfer mixed material into another clean container and mix for an additional minute.

- ⚠ Product should be used immediately after mixing.
- ⚠ Do not use product that has begun to cure.
- ⚠ Do not mix product longer than eight minutes.
- ⚠ Over mixing will prematurely initiate the curing process.

INSTALLATION

Simiron recommends that all application instructions be followed to ensure satisfactory results.

Product **must** be between 75 – 80°F before use. Product container may be placed in warm water until proper temperature is achieved.

Environment **must** be between 75 – 80°F during application and curing process. Environment should also be free of dust and other airborne contaminants.

Before starting a project, care should be taken to ensure that enough **SIMIRON Casting Resin** is available to complete the project. A shortage of material may result in undesired results.

SEAL COAT:

It is best to determine if your surface needs a seal coat before starting your project. Seal coats are important because porous or rough surfaces may lead to excessive air bubbles. Seal coating the surface will help prevent air bubbles from attaching to the surface.

SIMIRON Casting Resin may be used as the seal coat. Porous or unsealed wood such as tabletops, bars, hardwood, barnwood, knotty wood or other types of wood should be sealed before applying flood coat. Well-seasoned or dry wood such as barnwood or kiln dried wood may require multiple seal coats. When pouring over aluminum, copper, stainless steel, plastic laminate (like Formica®), or other non-porous surfaces a seal coat is not needed. Be sure that these surfaces are clean and free of contaminants such as oil or grease.

Allow any stains, varnishes or other coatings to completely dry before applying seal coat overtop. Do not apply over oil-based finishes.

Delicate objects such as pictures may be damaged by epoxy resin and should be sealed with an acrylic or polyurethane coating before embedding with epoxy resin.

If a seal coat is needed only mix a small batch of material, as the material will cover a much larger area. Use a brush to spread a thin coat over the surface. Allow seal coat to dry a minimum of 4 - 6 hours before applying the flood coat.

EDGES:

Flood coats may be allowed to run over the edges. Vertical edges will not be as thick as horizontal surfaces so be sure to use a brush to ensure the coating is evenly applied on the edge. Drips will form underneath the edge during the leveling and curing process. Using a flat scraper, excess drips can be removed prior to final curing. Drips that harden can be removed by sanding once the coating is fully cured.

REMOVING AIR BUBBLES:

Allow the flood coat to level for 15 minutes after application before starting the air bubble removal. Air bubbles are created from product mixing, application and surface tension so it's perfectly normal to see these, but it is important to remove them. The best tools for removing air bubbles are a handheld propane torch or heat gun. Hold the torch or heat gun approximately 6 – 10 inches away from the coating and quickly move around the surface. You will see the air bubbles pop immediately. Continue doing this method every 10 – 15 minutes until all bubbles are removed. This may take up to an hour to remove all entrapped bubbles. ⚠️ Prevent the torch from getting too close to the coating and do not hold the torch in one area for too long, as scorching can occur.

CLEAN UP

Wash hands with soap and warm water. Clean tools using a solvent such as acetone, nail polish remover or denatured alcohol. Follow solvent manufactures SDS while using.

LIMITATIONS

- ⚠️ Do not use in low-temps
- ⚠️ Do not use over oil-based products.
- ⚠️ Do not apply over 2" thick.
- ⚠️ Do not use in high humidity conditions.
- ⚠️ Do not use material that has crystallized.

FLOOD COAT:

To prevent pooling and an uneven coat of material, ensure that the surface to be coated is as level as possible. Flood coat can be applied up to 2" thick. If thicknesses greater than 2" are desired, then multiple coats will need to be applied. Allow flood coat to cure between 16 – 24 hours before applying a second flood coat.

Apply flood coat by starting on one end and pour the resin the entire length of the surface. Evenly pour the mixed resin across the surface using a zig-zag pattern. After all material is poured, do not try to scrape any additional material out of the container. Material will begin to flow and self-level. If there are areas where thicker amounts of material may have been poured, you may move it around using a notched plastic trowel, squeegee or foam brush.

ADDITIONAL COATS:

Allow flood coat to cure between 16 – 24 hours before applying a second flood coat. If allowed to cure for longer than 48 hours, it is recommended to lightly sand the surface using a 220 – 300 grit sandpaper to ensure proper adhesion between layers. Wipe sanded surface clean with a tack-cloth or solvent such as acetone or denatured alcohol so that no debris from sanding is entrapped. Follow flood coat application directions again for each additional coat applied.

CURING:

After application of the final coat, the coating should be allowed to properly cure in a controlled, clean, and dust-free environment free of contaminants at 75 – 80°F for 24 - 48 hours. Allow coating to cure a minimum of 5 days before returning into full service.

Tack Free: 24 – 36 hours
Full Cure: 5 days

SHELF LIFE AND STORAGE

Shelf life is 12 months when stored in factory-sealed containers indoors at 60°F to 80°F (15°C to 27°C) for Base and Activator. Keep containers tightly sealed.

- ⚠️ DO NOT FREEZE. Keep away from sparks or flames.
- ⚠️ Do not place containers against an exterior wall or on the floor. If resin component thickens or crystallizes, it may be reconditioned by placing the container in a bath of warm water (approximately 150°F) and slowly stirring until product liquefies.

PACKAGING

Size/Finish	Item Number
Casting Resin — 1.5 Gal Kit	40005610



CASTING RESIN

PRODUCT DATA SHEET
Edition 01/2020
Version 001
30000261

TECHNICAL ASSISTANCE

Information is available by calling SIMIRON:
Toll Free: 1.866.515.8775 / Telephone: +1.248.686.3600



TECHNICAL & SAFETY LITERATURE

To acquire additional information or technical and safety literature, please visit:
www.simiron.com

LIMITED WARRANTY

SIMIRON warrants this product to be free from defect in the material that affects its performance for a period of 10 years (from date of purchase). SIMIRON will replace at no charge the quantity of the Coating that SIMIRON determines has failed to perform, as the sole and exclusive remedy for any breach of this warranty and/or any other defect or failure of the coating. Proof of purchase is required. Cost of labor for application of any product specifically is excluded.



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