TECHNICAL DATA SHEET
RR Series 2000 Epoxy

MULTI-PURPOSE

- Product Number: 194-M0-101 (Part A)
- Product Number: 194-U0-101 (Part B R1 Standard Cure)
- Product Number: 194-U0-102 (Part B R2 Slow Cure)
- Product Number: 194-U0-103 (Part B R3 Fast Cure)

PRODUCT DESCRIPTION

RIVER RESINS SERIES 20000 Epoxy is a high-solids, multi-purpose epoxy coating designed for use as a primer, build coat, or high-gloss topcoat on properly prepared concrete substrates. It delivers excellent abrasion resistance, chemical durability, and long-term performance, and can be applied clear or pigmented. Engineered specifically for professional flooring installers, the system provides consistent results, predictable cure performance, and job-site flexibility.

BENEFITS

- Primer and epoxy topcoat system
- High-gloss, easy-to-clean finish
- Fast cure for quicker return to service
- Compatible with sand-filled resurfacers (typically 7.5:1 silica sand)
- Suitable for broadcast systems using silica sand, color quartz, or vinyl chips
- Low maintenance, durable performance

To accommodate varying ambient temperatures, jobsite conditions, and working time requirements, RIVER RESINS SERIES 2000 Epoxy is available with three Part B hardener options:

- R1 Standard Hardener – Balanced working and cure time for most installation environments
- R2 Fast Hardener – Reduced working and cure time for cooler temperatures or accelerated schedules
- R3 Slow Hardener – Extended working time for higher temperatures or large-area installations

Selecting the appropriate hardener allows installers to optimize pot life, flow, and cure performance while maintaining consistent system properties.

TYPICAL PROPERTIES & WORKING TIME CHART

Mixed Viscosity (77°F): 590 cps
Flash Point: >255 °F
Weight: 8.1 lbs/gal
VOC (A+B blended): 17 g/L (Clear: 0 g/L)

COMPRESSIVE STRENGTH — ASTM C579-A

(Resin Part A + Hardener Part B)

Cure Time	Clear	Pigmented
16 hrs	5,800 psi	4,900 psi
24 hrs	7,000 psi	6,103 psi
72 hrs	9,633 psi	8,510 psi
7 days	11,849 psi	10,849 psi

TECHNICAL DATA SHEET
RR Series 2000 Epoxy

MULTI-PURPOSE

- Product Number: 194-M0-101 (Part A)
- Product Number: 194-U0-101 (Part B R1 Standard Cure)
- Product Number: 194-U0-102 (Part B R2 Slow Cure)
- Product Number: 194-U0-103 (Part B R3 Fast Cure)

WORKING TIME / POT LIFE COMPARISON (APPROXIMATE)

TYPICAL PROPERTIES & WORKING TIME CHART (Continued)

(Time between mixing and loss of workable fluid state — thin film on substrate)

Temperature (°F / °C)	R1 Standard Cure	R2 Slow Cure	R3 Fast Cure
• 65 °F (18 °C)	~45–60 min	~60–90 min	~30–40 min
• 70 °F (21 °C)	~30–45 min	~45–75 min	~20–30 min
• 75 °F (24 °C)	~25–35 min	~40–60 min	~15–25 min
• 80 °F (27 °C)	~20–30 min	~35–55 min	~10–20 min
• 90 °F (32 °C)	~15–25 min	~30–45 min	~8–15 min

Notes:
R2 Slow Cure is formulated to extend working/open time and delay initial gel in warmer environments or larger broadcast systems. Typical slower formulations may provide longer working windows and extended set times than standard hardeners at the same temperature.

R3 Fast Cure accelerates reaction and gel time for cooler environments or accelerated schedules. Fast hardeners often reduce working time while allowing earlier handling strength.

Working times will vary with batch size, substrate temperature, humidity, mixing technique, and film thickness — smaller batches and thin films typically extend working time.

INSTALLATION NOTES (WORKING TIME)

- Measure & Pre-mix: From the R2 (Slow) Part B container, pre-measure 1 part Part B into a separate clean container before adding to Part A in the mixing pail.
- Pot Life: Only mix the amount of material that can be applied within the selected hardener's working time window.
- Temperature Effects: Higher temperatures shorten working time and accelerate cure; lower temperatures extend working time but also may slow overall cure.
- Film Thickness: Thicker films reduce working time due to exothermic heat build-up.

Abrasion Resistance:

- 57–60 mg loss (CS-17 wheels, 1,000 g, 1,000 cycles)
- Water Absorption (ASTM C-413): <0.1%
- Flammability (ASTM D-635): Self-extinguishing
- Adhesion to Concrete: >400 psi

All data represents typical laboratory results under controlled conditions. Field results may vary.

TECHNICAL DATA SHEET
RR Series 2000 Epoxy

MULTI-PURPOSE

- Product Number: 194-M0-101 (Part A)
- Product Number: 194-U0-101 (Part B R1 Standard Cure)
- Product Number: 194-U0-102 (Part B R2 Slow Cure)
- Product Number: 194-U0-103 (Part B R3 Fast Cure)

PACKAGING & MIX RATIO

Mix Ratio: 2:1 by volume (Part A : Part B)

Available Packaging Options
3-Gallon Kit
- Part A (Resin): 2 gallons
- Part B (Hardener): 1 gallon

15-Gallon Kit
- Part A (Resin): 10 gallons
- Part B (Hardener): 5 gallons

150-Gallon Bulk Kit
- Part A (Resin): Two (2) × 100-gallon drums
- Part B (Hardener): One (1) × 50-gallon drum

Tote quantities available upon request.
Pigmented Systems: Add 1 pint of colorant per 3-gallon mix unless otherwise specified.

COVERAGE & FILM THICKNESS
Typical Primer Application (All Cure Options): 8 mils

Coverage (All Cure Options):
- Approximately 200 sq ft per gallon
- Approximately 600 sq ft per 3-gallon mix
- Application Thickness Range: 6–20 mils, depending on system requirements.

Cure Option Considerations

R1 Standard Cure:
Provides balanced working time and flow characteristics for most installation environments while maintaining consistent coverage and film build.

R2 Slow Cure:
Extended working time allows improved flow, leveling, and edge control in higher temperatures or large-area installations. Coverage rates remain consistent; slower gel time may improve wet-out at higher film builds.

R3 Fast Cure:
Accelerated working and cure time for cooler conditions or fast-track schedules. Smaller batch sizes are recommended to maintain target film thickness and prevent premature set.

Application Method:

Apply using a squeegee and back-roll with a chemical-resistant roller to achieve uniform film thickness and eliminate puddling.

TECHNICAL DATA SHEET
RR Series 2000 Epoxy

MULTI-PURPOSE

- Product Number: 194-M0-101 (Part A)
- Product Number: 194-U0-101 (Part B R1 Standard Cure)
- Product Number: 194-U0-102 (Part B R2 Slow Cure)
- Product Number: 194-U0-103 (Part B R3 Fast Cure)

INSTALLATION GUIDELINES

Before You Begin

RIVER RESINS SERIES 2000 Epoxy has fair UV resistance and will amber with prolonged exposure. For UV-stable systems, apply a pigmented or UV-resistant high-solids urethane topcoat. Test concrete for moisture vapor transmission prior to installation.

Surface Preparation

- Shot blasting or diamond grinding preferred
- Achieve a 10–20 grit sandpaper profile
- Remove oils, sealers, coatings, and contaminants
- Substrate must be clean, sound, and dry

Mixing

- Pre-packaged kits must be mixed in full units.
- Combine Part A (Resin) and Part B (Hardener) into a clean 5-gallon pail
- Mix with a jiffy-style mixer for 2–3 minutes
- Add colorant (if required) into the vortex while mixing
- Note: Higher temperatures reduce working time. Do not mix more material than can be applied within pot life.

Application

- Immediately pour mixed material onto substrate
- Squeegee to desired thickness and back-roll to level
- Maintain a wet edge at all times
- Avoid rolling back into material that has begun to set to prevent color variation

CURE SCHEDULE

R1 – Standard Cure

	50°F	70°F	90°F
Temperature			
Working Time	30–40 min	20–25 min	15–20 min
Dry to Touch	12–14 hrs	7–8 hrs	5–6 hrs
Maximum Recoat	36 hrs	30 hrs	24 hrs

R2 – Slow Cure (Extended working time for warm temperatures or large placements)

	50°F	70°F	90°F
Temperature			
Working Time	45–60 min	30–40 min	20–30 min
Dry to Touch	16–20 hrs	10–12 hrs	7–9 hrs
Maximum Recoat	48 hrs	36 hrs	30 hrs

R3 – Fast Cure (Accelerated cure for cool temperatures or fast-track schedules)

	50°F	70°F	90°F
Temperature			
Working Time	20–30 min	12–18 min	8–12 min
Dry to Touch	8–10 hrs	4–6 hrs	3–4 hrs
Maximum Recoat	24 hrs	18 hrs	12 hrs

TECHNICAL DATA SHEET
RR Series 2000 Epoxy

MULTI-PURPOSE

- Product Number: 194-M0-101 (Part A)
- Product Number: 194-U0-101 (Part B R1 Standard Cure)
- Product Number: 194-U0-102 (Part B R2 Slow Cure)
- Product Number: 194-U0-103 (Part B R3 Fast Cure)

CURE SCHEDULE NOTES

- Cure times are approximate and will vary based on batch size, film thickness, substrate temperature, airflow, and humidity.
- Higher temperatures shorten working time; lower temperatures extend cure.
- Fast Cure systems should be mixed in smaller batches to prevent premature gel.
- Always verify substrate temperature is above dew point prior to application.

HUMIDITY & DEW POINT

High humidity and dew point conditions may cause condensation or amine blush, which can interfere with adhesion. Verify substrate temperature is above dew point prior to application. If hazing or greasy residue appears, contact River Resins Technical Services before proceeding.

CLEANING

Clean tools and equipment immediately after use with xylene or approved solvent.

STORAGE & SHELF LIFE

- Store unopened containers indoors, out of direct sunlight
- Ideal storage temperature: 60–80°F
- Shelf life: Minimum 1 year in unopened containers

DISPOSAL

Dispose of all materials in accordance with applicable federal, state, and local regulations.

SAFETY

Use adequate ventilation. Avoid contact with eyes and skin. Wash skin with soap and water after contact. Flush eyes with water and seek medical attention if irritation persists. Industrial use only. Refer to the Safety Data Sheet (SDS) before use.

River Resins
1329 Harrison Ave SW
Canton, OH 44706
330.455.5125
www.riverresins.com