

TECHNICAL DATA SHEET

KOMPOZIT RC-100 RUST CONVERTER

WATER-BASED RUST TREATMENT

- Ready to use · no thinning required
- Water-based formula
- Converts tightly attached rust
- Reduces the need to remove rust down to bare metal
- Prepares surfaces for compatible protective coatings

FOR RUSTED IRON & STEEL ONLY.

Do not use on aluminum, galvanized steel, zinc, copper, brass, or bronze. RC-100 is not designed to treat corrosion on these metals, and its acidic formula may damage or discolor them.

DESCRIPTION & USES

KOMPOZIT RC-100 Rust Converter is an industrial-strength, water-based treatment designed to convert and stabilize rust and prepare iron and steel surfaces for compatible protective primers and topcoats. Its two-stage chemical action helps loosen surface oxidation while reacting with iron in the remaining rust to form stable ferric tannate compounds, changing the rusted surface from reddish-brown toward blue-black. Because RC-100 chemically stabilizes tightly adhering rust, complete removal down to bright metal is generally unnecessary.

Use on rusted railings, gates, tools, machinery, trailers, vehicle frames, and other iron or steel surfaces. RC-100 is a surface treatment, not a protective paint. Apply a suitable protective coating after treatment, especially for outdoor use.

TYPICAL PRODUCT DATA

Product type	Water-based rust treatment
Liquid appearance	Dark amber to reddish-brown
Treated surface appearance	Blue-black to black
Weight per gallon	Approximately 8.59 lb
Specific gravity @ 25°C	1.028–1.035
pH @ 25°C	0.9 –1.5
Solids by weight	Approximately 6.8%, calculated
VOC content	Less than 5 g/L, calculated
Application temperature	50–95°F (10–35°C)
Thinning	Do not thin
Cleanup	Soap and water
Shelf life	24 months unopened under recommended storage conditions

COVERAGE

Approximate theoretical coverage is **450–500 sq ft per gallon** on smooth or moderately rusted steel, and **300–380 sq ft per gallon** on rough or heavily pitted surfaces.

Actual coverage varies with surface condition and application method. Avoid applying extra material simply to achieve a film thickness.

SURFACE PREPARATION

Remove loose rust: Use a scraper, stiff wire brush, or suitable power tool to remove loose, flaking rust, scale, and peeling paint. Work into pits, seams, and corners where loose material can collect. Leave only rust that is firmly attached. Heavy rust deposits must be reduced before treatment; complete removal to bright metal is generally unnecessary.

Clean thoroughly: Remove dirt, grease, oil, and other contaminants with a suitable cleaner. Scrub greasy areas and rinse away all cleaning residues with fresh water. After brushing or sanding, remove remaining dust and debris. Allow the surface to dry before applying RC-100.

Remove salt: Thoroughly wash surfaces exposed to saltwater, coastal conditions, or road salts. Pay particular attention to joints, seams, and deeply pitted areas where contaminants can collect. RC-100 does not remove or neutralize salt contamination.

Existing paint: RC-100 will not penetrate intact paint. Remove loose paint and smooth the edges of remaining coatings. Check that any paint left in place is firmly attached. Wipe product off sound painted areas before it dries to minimize staining.

Bare metal: Avoid heavy application on bare or lightly rusted areas, where excess product may leave residue. Focus treatment on the remaining rust rather than building a thick coating over exposed metal.

Final check: Before treatment, the surface should be dry and free of loose material, oil, cleaning residue, and visible salt deposits. Protect adjacent painted surfaces, concrete, masonry, and other finishes from splashes and staining.

When scraping or sanding old coatings, take appropriate precautions against hazardous dust, including possible lead dust.

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APPLICATION

Apply when air and surface temperatures are **50–95°F (10–35°C)**. The surface must be dry and free of condensation. Avoid hot surfaces, direct sunlight, or conditions that cause the product to dry too quickly.

1. Ready to use. May be stirred gently before use if required. Do not shake vigorously or thin.
2. For brush or roller application, pour the amount needed into a clean plastic container or tray.
3. Apply a thin, even treatment using the supplied **spray nozzle**, a **synthetic brush**, or a **roller**. Work the liquid into pits and crevices. Avoid puddles and excessive buildup.
4. Allow the surface to react and dry. Apply additional treatment only where substantial untreated rust remains.

Spray: Use the supplied nozzle to wet the surface evenly. Protect nearby surfaces from overspray and avoid breathing spray mist.

Roller: Use a 1/4–3/8-inch nap synthetic roller on broad surfaces.

IMPORTANT — KEEP UNUSED PRODUCT CLEAN: Do not dip used brushes or tools into the original container. Do not pour leftover working material back into the container. Rust and metal contamination can cause the remaining product to react prematurely.

DRYING & TOPCOATING

Typical times below are based on **77°F (25°C)** and **50% relative humidity**.

Stage	Typical time
Visible darkening begins	5–15 minutes
Touch dry	20–30 minutes
Additional treatment, if needed	45–60 minutes
Drying before topcoating	Typically 12–24 hours

Cool temperatures, high humidity, poor airflow, or heavy application will extend drying time.

Before topcoating: Allow the treated surface to dry completely. Check for loose material or surface residue. Darkening shows that a reaction has occurred; it does not by itself confirm that the surface is ready to topcoat.

If a light powdery or crystalline residue remains, remove it with a damp, lint-free cloth and allow the surface to dry again.

TOPCOATING

Primer and paint selection: RC-100-treated surfaces may accept many compatible alkyd, acrylic, epoxy, polyurethane, and automotive undercoating systems. Compatibility varies by product.

Test the complete primer and paint system on a representative area before coating the entire project. Follow the coating manufacturer's preparation and application instructions.

CLEANUP & STORAGE

Clean brushes, rollers, and equipment promptly with soap and water. Clean accidental splashes immediately. The product and its reaction with rust can cause persistent staining on concrete, masonry, clothing, and nearby finishes.

Keep the original container tightly closed. Store at **41–77°F (5–25°C)**, away from direct sunlight and incompatible materials. Protect from freezing.

Contain spills with a suitable absorbent. Dispose of product and containers according to applicable requirements. Do not discharge into drains or waterways.

SAFETY & LIMITATIONS

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles and chemical-resistant gloves suitable for acidic liquids. Use adequate ventilation and avoid breathing spray mist. Do not ingest.

Read the product label and current **Safety Data Sheet (SDS)** before use. Refer to the SDS for complete hazard, first-aid, handling, and disposal information.

RC-100 does not replace cleaning or removal of loose rust and scale. It is not a substitute for abrasive blasting where required by a project or coating specification. It is not intended as a stand-alone, long-term outdoor or immersion coating.

Not recommended for high-heat surfaces exposed to temperatures above **150°F (65°C)**, such as exhaust manifolds or grill components.

DISCLAIMER

The information provided represents typical values and general guidance. Surface condition, preparation, application, and coating selection affect results. The user is responsible for confirming suitability and compatibility for the intended project. Refer to the current SDS and product label. Contact Kompozit with any questions or concerns.