



The Truth About Stainless Steel

"Stainless steel never rusts." We hear this phrase constantly, but it is not completely accurate.

The secret to stainless steel's durability is a microscopic, invisible barrier called the "passive layer." Because the steel contains a high level of chromium (usually 13-25%), it reacts with oxygen to form a dense chromium oxide film. This protective layer acts as a shield, preventing oxygen and moisture from penetrating the metal surface and causing rust.

However, if this invisible film is damaged or scratched, the steel underneath becomes vulnerable to corrosion. Understanding how to protect this layer is the key to keeping your sink looking brand new for a lifetime.

What Causes "Rust" on a New Sink?

Often, what looks like rust on a new sink is actually "surface rust" caused by external factors, not the sink itself. Common culprits include:

Renovation Debris: Dust from metal tools, cement, or paint dropped into the sink during installation can trigger localized rust spots.

Chemical Residue: Leaving harsh chemical cleaners, alkaline water, or salt-heavy substances on the surface will cause localized corrosion.

Food Acids: Organic juices from vegetables, fruits, or noodle soup left sitting in the sink with water and oxygen will form organic acids that slowly corrode the metal.

Water Quality: Tap water containing high levels of minerals or iron pipe rust can form scale and reduce the stainless steel's corrosion resistance over time.

Everyday Care Routine (Do's)

Maintaining your sink takes only a few seconds a day. Follow these golden rules:

Wash & Dry: Regularly wash the surface with mild soap and warm water to remove attachments

NO Harsh Abrasives: Avoid rough abrasive powders that can physically damage the passivation layer.

NO Chlorine or Bleach: Do not let bleach or chlorine-based cleaners sit in the sink. If they are used, rinse them away immediately and thoroughly.

Troubleshooting: How to Safely Remove Rust Spots

If a rust spot or stubborn stain does appear, don't panic. Follow this factory-approved method to remove it safely:

Clean: Wash the affected area with warm soapy water and dry it completely.

Apply Solution: For light rust, apply a mixture of baking soda and water, or household vinegar. You can also use a non-chloride commercial cleaner designed specifically for stainless steel.

Gently Scrub: Using a soft sponge or a nylon brush, gently wipe the area following the direction of the metal grain.

Rinse & Dry: Rinse the sink thoroughly with clean water and wipe it completely dry to prevent water spots from forming.

Built for a Lifetime

ATLA is committed to providing premium products that stand the test of time. We offer a wide range of stainless steel grades, including 304 and 316, designed to meet the most demanding project requirements. For extreme environments, we also offer the latest PVD (Physical Vapor Deposition) coating technology, which far exceeds traditional electroplating in rust prevention and wear resistance.

If you have any questions about stainless steel maintenance or material selection, please feel free to contact our expert team.

Contact Us

