



Stainless Steel
Care and Maintenance

How to Clean Stainless Steel

Stainless is one of the most resilient materials available for a wide range of industrial uses. Its chromium film is responsible for its resistance to rust and tarnish, and with proper care this film can provide protection for many years. The integrity of the film can be damaged by dirt and other contaminants, however, so stainless steel must be kept clean. Follow these guidelines to keep your stainless shining.

Cleaning Stainless Steel

1. Attend to stains as quickly as possible. Stainless steel does not hold stains easily, but it's best to clean up spills and marks as quickly as possible. While it will probably be possible to remove a stain after it sets, it will require more work and potentially damaging or scratching cleaners.
2. Fill a sink or bucket with warm, soapy water or a weak ammonia and water solution. Stainless steel is durable, but can be sensitive to harsh cleaners, so for routine cleaning, use a gentle detergent, such as dish soap. Dilute the detergent with very warm water. It is better to have too little detergent than too much.
3. Wet a soft towel or dish cloth in the soapy water. Whenever possible, avoid using an abrasive cloth on stainless steel. Instead, get a soft cloth or nylon sponge, dip it in the water-detergent solution, and wring it out thoroughly. If you prefer to use a cleaning brush, choose one with soft bristles.
4. Scrub the stainless steel. Take your cloth and softly scrub the surface. It is typically not necessary to press very hard. If the stainless steel has a polished finish, **scrub with the finish, not against it, and avoid scrubbing with a circular motion.** Rinse and wring out your cloth frequently to keep it damp and to avoid smearing potentially abrasive contaminants over the surface of the steel.
5. Rinse thoroughly with warm, clean water. Using a clean cloth or sponge, wet and wipe down the stainless. Be sure to remove all the detergent residue - it can leave streaks and a rainbow-colored discoloration.
6. Repeat if necessary. The gentle cleaning should take care of most dirt and contaminants, but if stains persist, repeat the process. Be patient - persistent scrubbing will usually win out over even the toughest stains.
7. Apply a mild abrasive cleaner. Only apply an abrasive product after you've exhausted your patience (and your arms) scrubbing. Start by trying a paste of water and sodium bicarbonate (baking soda). Rub the paste onto the stainless with a soft cloth. Again, exercise patience, scrub well and rinse thoroughly.
8. Go all out. If the combination of soaking, detergent and a mild abrasive didn't work, you're going to have to get serious. Apply a more caustic abrasive cleaner such as the commercial brands of "Ajax" or "Comet." To do this, wet a cloth or sponge with hot water, put the abrasive on one side and, **moving in the direction of the stainless grain**, apply the abrasive side of the cloth to the stainless.
9. Flip the towel over to the side without the abrasive, and remove the cleaner you just applied (again in the direction of the grain). Keep this towel hot and damp, but not dripping wet.
10. Rinse thoroughly and dry. Immediately after wiping off the abrasive cleaner, rinse well using clean, warm water. Dry the stainless using a second cloth, **again rubbing with the grain.**

11. A 3M Stainless Steel Cleaner can then be used to prevent future contamination. See attached Spec Sheet on the Stainless Steel Cleaner.

12. The only and last way to get the material off of the stainless steel would be to apply the 3M stainless Steel Cleaner with a WHITE Scotch Brite Pad 3M 7445. **Again moving in the direction of the stainless grain ONLY .**

TIPS

- Clean often. Most people let contaminants build up on larger objects. The more frequently you clean, the easier cleaning will be and the less chance you will have of contaminants damaging the stainless steel's protective film.

- For really tough rust stains or heat discoloration, apply a 10% solution of nitric acid (aqua fortis). This is generally only for industrial use.

Warnings:

- Be careful when mixing any types of cleaners. Don't mix commercial cleaners, such as "Bar Keepers Friend", with vinegar or with other brands.

- Do not apply bleach to stainless steel. Stainless is sensitive to chlorine, and contact with bleach will result in staining and damage to the protective film.

- Nitric acid is a highly corrosive chemical and should not be used if you are not familiar with proper handling and disposal techniques.

Things You'll Need

- Warm water
- Soft clean cloths or sponges
- Mild detergent or ammonia solution