

# Passivate 306

Passivate 306 is a citric acid based concentrated passivation formulation designed to clean surface of stainless steel from free iron and other contaminants present in the surface of stainless steel itself and deposited by the working on it, drawing, machining, tooling etc. The purpose is to clear all the impurities and rust potential from the surface of stainless steel.

Passivate 306 has been used for more than a decade in medical instruments industry. Highly effective in passivation of stainless steel parts in both 300 & 400 series. Especially surgical, Dental and other instruments of stainless steel. Passivate 306 should be used where high quality of tools and processes have been used or the parts with less machining and high standards of passivation is required. Besides being highly effective Passivate 306 has minimum or no effect on the base metal. Does not etch the surface. Very important for workshop is that it gives great flexibility in batch schedules and timings.

## **Process:**

Clean and degrease the instruments before passivation step. The cleaner the surface the better passivate surface is obtained.

Mix one part of passivate 306 with 5 parts of clean water (De-ionized or filtered with reverse osmosis) Warm upto 80 degrees C to activate the solution. Passivate 306 also works at room temperature, but to shorten the batch time and speed up the process, we recommend to warm up the solution as described.

The solution must be kept below boiling, high temperatures can reduce the efficiency of the liquid. Non magnet preferably 316 grade stainless steel tanks should be used to fabricate passivation tanks. Dip the instruments / parts 20-30 minutes. Dipping time is very important variable in this process and can be adjusted according to the nature of instruments. Usually instruments with less machining need lesser time and instruments with more machining, joints, welds, etc. need more dipping time. So variations in time and concentration are allowed depending on the application. Experiments can determine best duration of time and compatibility of the chemical with your products.

Water Rinse thoroughly. A neutralizer solution may be used to neutralize any residues of passivation chemical. Again Water Rinse and dry.

Any test recommended for the instruments/parts according to the material and process used, may be done and inspected. The passivation process may be repeated for any problem pcs.

**Care:** Although Passivate 306 is very safe to use, yet the process should be done in well ventilated area. Eye protection should be used by the workers. May cause slight skin irritation and should be water rinse immediately.

**Storage:** Passivate 306 should be stored in plastic containers at normal temperatures.

**Packing :** 10L, 20L, 50L, 200L.

