



CLEANING AND SANITATION

The difference between cleaning and sanitizing

Cleaning is the process of eliminating stubborn stains and grime whereas sanitation is the process of reducing microbes to a safe level. If you run a retail outlet, don't hesitate to point this out to your customers who make wine at home. The settings may be different but the principles remain the same whether the wine is made at home or at a brew on premise.

Common Cleaners

Trisodium Phosphate (Saniton) – Unscented detergent that is especially useful for stainless steel. Dissolve 2 grams per litre of warm water (2 tsp. per gallon). Soak equipment for 20 minutes and scrub any stubborn stains. Rinse well with hot water. Avoid contact with aluminum, tin, lead and zinc due to the formation of hydrogen gas.

Sani-brew (Diversol) – Chlorinated pink powder that is not to be used on stainless steel. Dissolve 3.5 grams per litre of cold water (5 tsp. per gallon). Thoroughly scrub stained equipment and rinse with hot water to ensure all cleaning residue is removed. Avoid contact with acids, amines or ammonia due to the formation of dangerous gases.

Common Sanitizers

Potassium or Sodium Metabisulphite – Effective sanitizers that also prevent oxidation. Dissolve 50 grams per 4 litres of **cold** water. Allow the equipment to drip dry or rinse the equipment with clean water and use immediately. Dust and vapour from the solution is irritating to the lungs. Avoid contact with alkaline solutions such as Sani-brew or bleach.

Iodophor – Excellent for use on stainless steel. Mix 1 mL per litre of cold water. You must use a syringe for accurate measurement. Shake off excess liquid and let the equipment dry. Iodophor is only effective when mixed accurately. A new solution must be made fresh for each use. This product is hazardous for people with iodine allergies.

Sani-brew (Diversol) – Also used as a sanitizer that is not to be used on stainless steel. Dissolve 3.5 grams per litre of cold water (5 tsp. per gallon). Soak stained equipment for up to 48 hours. Rinse thoroughly with hot water. Avoid contact with acids, amines or ammonia due to the formation of dangerous gases.

CLEANING AND SANITATION CONTINUED

Cleaning During Fermentation Stages

Primary Stage: This involves everything from primary pails to airlocks, transfer hoses and spoons. Using a recognized cleaner, clean, rinse, and sanitize everything first. Bear in mind that plastic tends to scratch easily and can harbour bacteria and wild yeast.

If using metabisulphite, store primary fermenters with a small amount of sulphite solution. The sulphur dioxide fumes will keep the surface sanitary and all you need to do prior to use is shake it dry. It not only saves time but is a great way to ensure a clean and sanitary start to the winemaking process. Store bungs, airlocks and spoons in a sanitizing solution. Make sure the solution is changed periodically to ensure effectiveness.

Secondary Stage: Glass carboys are safer from a microbial standpoint, but need to be handled with care. If using plastics, ensure that it is scrutinized for scratches and nicks periodically. Carboys are best stored with a litre of sulphite solution in it. Make sure you have solid bung to prevent the sanitizer fumes from escaping.

Finishing: This involves plate or cartridge filters, automated bottle fillers and corkers. These “late contact” pieces of equipment have a lot of moving pieces and hence can be a challenge to clean and sanitize. Filter machines should have the plates removed after use and then scrubbed clean and sanitized. Do not leave wine in the unit. Similarly do not leave any sanitizer in the unit. Always flush filter machines with water before cleaning and sanitizing and allow all hoses to drain when finished.

Bottling machines are great from a time saving standpoint, but can cause severe quality issues if not cleaned and sanitized appropriately. Nozzles tend to accumulate residue and require prompt attention. Some bottle fillers have overflow tubs that require cleaning and sanitation as well. When not in use, insert a bottle with a sanitation solution to keep the nozzle sanitized. Do not let wine sit in the hoses of unit. Flush with water prior to cleaning and sanitizing.

A quick way to determine the effectiveness of a cleaning regime is to run a Q-tip over all the major areas that come in contact with wine. If any residue is on the cotton swab then additional cleaning is recommended to ensure the integrity of the wine.

For further information on craft winemaking, visit www.rjscraftwinemaking.com.