



Phone: 724-503-4286

Web: armensbarrels.com

Email: info@armensbarrels.com

Restaurant: 10 McCoy Lane, Washington PA 15301

Mailing: 408 Forest Estates Dr, Pittsburgh PA 15241

HAZARD ANALYSIS CRITICAL CONTROL POINTS (HACCP)

Following critical control points were identified for wine and liquor production. Each CCP assumes recording at the time of occurrence, either paper based or electronic. Paper based recording should be converted into image and stored in electronic format. Each recording shall have associated date and time stamp, name of the person, CCP type and data that is required to be recorded for particular CCP.

Deliveries of Raw Materials

Main raw material is fruit juice and rectified spirit. Upon delivery, the accepting person should make sure that:

- Volume of raw material is according to bill of lading (BOL) or invoice.
- Containers or packages are tightly sealed and undamaged.
- Raw material smells and looks good.
- Gravity (brix) and acidity (pH), or ABV (in case with rectified spirit) are measured and recorded.
- Sample of rectified spirit from each tote is taken for keeping on premises for 12 months.
- Copy of BOL or invoice is emailed to info@armensbarrels.com.

Deliveries of Supplies

Supplemental materials are sugar, acids, preservatives (sulfates), etc. Upon delivery, the accepting person should make sure that:

- Delivered ingredients are according to packing slip.
- Containers or packages are undamaged.
- There is an expiration date on each container or package.
- Delivered ingredients are not expired.
- Copy of packing slip is emailed to info@armensbarrels.com.

Note: Do not mix new arrivals of supplies with previous arrivals, keep them separately.

Transferring Liquid

Transferring liquid to fermenters/tanks should be done via pumps. Container's lids should be always sealed after the transfer. For transfer of juice into fermenters: do not keep lids sealed but donut-net shall be used to prevent contamination; level of juice in the fermenter shall be at least 2 inches below the top to prevent foam from spilling outside of the fermenter tank.

Operator shall keep head/hands outside of fermenter's open area to prevent physical contamination.

Adding Components

Most juices (depending on parameters) need extra sugar, acids, bentonite, etc before yeast is introduced. Such extra components could be added by pouring them right into the fermenter. When mixing components: pipe should be connected to the bottom fermenter's outlet, and other end should be secured at fermenter's top (without touching the juice) or connected to middle outlet.

Operator shall keep head/hands outside of fermenter's open area to prevent physical contamination.

Transferring to Barrels

Wine should be racked to barrels after end of alcoholic fermentation or in some cases, after end of malolactic fermentation. Rectified spirit would be transferred to barrels (brandy production) after distilling, filtering and watering down.

Each barrel should be filled all the way to the bung. Bung should be tightly inserted into barrel after filling and/or topping off, and after taking samples. It is important to take sample as quickly as possible, to prohibit wine from oxidation.

Wine Distillation

Wine should be racked from fermenter into still machine right before distillation. Lid of the fermenter should be adjusted accordingly to prevent wine oxidation. Operating of still machine requires supervision of at least one person at all times.

- Rectified spirit shall be stored within stainless steel container that has tight lid.
- Rectified spirit should be watered down to maximum of 40 ABV for second (third, etc) distillation.
- Rectified spirit should be watered down to 60 ABV maximum before racking to barrels for brandy production.

Note: Still machine produces rectified spirit with the ABV as high as 95%, which is highly flammable.

Watering Down

To water down rectified spirit, the purified water shall be poured directly into container with rectified spirit (or vice versa). As mentioned before, operator shall keep head/hands outside of container's open area to prevent physical contamination.

Spirits Filtering

- Rectified spirit should be watered down to 40% ABV before filtering.
- Granular activated carbon charcoal should be sanitized and rinsed prior to use.
- Granular activated carbon charcoal should be removed from container after filtering and dried out.

Product Bottling

The final product should be produced only by pallets. Pallet might contain different number of cases depending on order (60 cases is typical for wine). And each case might have different number of bottles inside (12 bottles is typical for wine).

Final product should be racked into intermediate sealed container before bottling. Before that, all bottling equipment shall be checked. Management should ensure that there are enough bottles, corks, labels and capsules. Management should also ensure that labels are COLA approved.

While the product is in the intermediate sealed container:

- So2 should be added to ensure adequate protection (wine production only).
- To prevent re-fermentation, potassium sorbate could be added (wine production only).
- Content of the container should be sampled before bottling (pH, So2, ABV, taste, etc).

Following should be taken into consideration for bottling:

- Bottles should be sanitized and rinsed prior to filling.
- Every product (wine, vodka, brandy, etc) should be filtered prior to filling the bottles.
- Company shall produce at least one extra case per each lot. Case should be stored in the facility for 1 year.

Employee

I have read this document, understood and agree to follow all above rules and regulations.

Employee Name (print)

Signature of Employee

Date