

Cholaca Dosage rates

• For craft breweries: 1/2 gallon to 1 gallon should be added per bbl, depending on how flavor forward you want your chocolate to be.

Cholaca brewing guidelines for craft breweries

- To ensure no extra fermentation takes place due to yeast consumption, filter the beer with a DE filter.
- Add Cholaca to chilled beer, 32F, after 2 days of yeast drops. Inject into the tank with a drum pump and recirculate for 1 hour for a 200 bbl tank.
- Dose on average 0.5 gallons per 1 bbl with the sweet. We noticed about a 0.1-0.2 increase in extract using an alcolyzer.
- We have not found any microbial instability, beers have held up well.
- Nonetheless, some craft breweries have adopted a new practice for all barrel aged beers and fruit/chocolate/coconut beers to be flash pasteurized prior to package. It's a very low BTU at a slow rate and so far, has enhanced the flavor stability of the beer. Most likely due to the denaturing of enzymes along with killing a few microbes.
- Some craft breweries have an extensive micro program that follows the beer throughout the process. And check archived beer every 2 months.

"We're currently receiving pasteurized 50 gallon drums of the Sweet Cholaca. We hook up a sanitized drum pump to the racking port of the 200 bbl fermenter and inject the whole drum. We rock the drum a bit during transfer to avoid stratification and loss. We blanket the inside of the drum with CO2 during transfer to minimize O2 pickup too. The cellar team rejoiced because of the ease of application compared to the spent material leftover from using nibs or baker discs. We're using 0.5 gallons per barrel. So, 100 gallons per 200 bbl tank. We use this on Death by Coconut, so its paired with the Coconut aspect of the beer too. We currently love the amount of chocolate flavor and the profile of the chocolate flavor to – a nice pure, bittersweet cacao. The sweetened version we felt helped the chocolate and coconut blend together and make each more potent without dominating the Porter flavors too.

The chocolate is added to crashed beer at 32F. We recirculate for 1 hr after dosing and then filter the beer 2-3 days later."

Tim Matthews Head of Brewery Operations Oskar Blues Brewery

"We add the Cholaca to the fermenter warm (+/- 65F) after the majority of the yeast has fallen out and been removed. I would let it sit warm for 3-5 days then cool the tank for an additional 7 days prior to transfer. If you don't have racking arms on your serving/bright tank I might recommend letting the beer sit cold for 10-14 days to get less sediment from the Cholaca into the next vessel. It does fall out of suspension but it can take some time.

In terms of adding the Cholaca we try to mix the beer and Cholaca in an exterior vessel, we use a 1bbl fermenter, then inject the slurry rapidly into the racking arm to promote as much interface between the beer and Cholaca as possible."

Jeremy Gobien Owner and Head Brewer Copper Kettle Brewing Company

Suggested solutions to possible issues

How to easily pump in from the drum: use a flux worm-drive drum pump and roll it around a bit before to keep it mixed.