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Beer Souring



SIMPLIFIED

FAQs

**Using beer souring blends is an easy way to introduce new beers to your product line.
No Risk Souring - No Bacteria Involved**

What is the difference between Acidulants vs. Souring Blends?

Acidulants are single acids for lowering pH. Souring Blends are complex blends of organic acids that replicate Kettle souring.

What is in the product?

The Hawkins Souring Blends are a proprietary blend of reconstructed carboxylic acids and other ingredients all of which are food grade. They are made to replicate kettle souring used in several styles of sour beer without the microbial risk to your systems and to promote consistency.

Is there any risk infection if the Beer Souring Blend was added after the boil? Fermenter, or, Bright Tank?

No. Souring Blends do not contain any microbes and at full concentration will kill most microbes.

How do the souring agents impact final canned/bottled beer shelf-life? Flavor, haze, etc...

The souring blends will behave just like a kettle sour and should not impact shelf-life except to make the pH too low for most spoilage organisms to grow.

Have we performed a shelf-stability on beers that were soured?

No, we have not conducted shelf-life on beers made with the product. We do not sell or make the final product (beer) to do a shelf-life study on and different beers will have much different shelf-lives (dark beers have much longer shelf-lives than IPAs) The Souring Blends will behave just like a kettle sour acids and should not impact shelf-life of beers.

How do the souring agents impact canning- liner compatibility?

The pH is well above soda in the final beers and they do not impact the liner.

Do the souring agents improve attenuation?

Yes, in testing and from some of the breweries we are seeing shortened fermentation times. In one in-house study we saw the fermentation time cut almost in half.

Do the souring agents impact yeast vigor/vitality when added towards the end of fermentation sufficient to be used as a starter for a new fermentation batch? Interest in yeast re-pitching instead of new yeast/starters?

We have not done studies of yeast vitality but yeasts like a lower pH and breweries are having no problem capturing and re-starting their yeast.

Do the souring agents cause any secondary fermentation similar to a hop creep?

We have no reports of that from the breweries currently using the products.

Are any components of the souring agents volatilized or lost during CO2 scrubbing?

No, the components are very stable to sparging and heat.

Are the organic acids created from natural processes and is the product Non-GMO? **The Organic - carboxylic acids are from fermentation processes, so if beer is natural so are the acids in the blends. They are not certified non-GMO as many are made from corn that may or may not be GMO, there is no genetic material left in the highly purified acid.**

Are souring agents consumed/used by yeast resulting in creation of different flavors?

No, but if the Souring Blends are introduced before pitching the yeast it will stress the yeast in the same manor as a kettle sour.

What are the impacts on pH and dissolved O2 in finish beer?

At higher use levels a higher pressure of CO2 may be needed to achieve the same level of dissolved CO2 as pH is part of the ability of beer to dissolve CO2. It should behave the same as any similar kettle soured beer you currently work with.

Do we have any products that mimic specific fruit flavors/notes, i.e. guava?

No, but we do have the ability to work with breweries to make a custom blend if requested, the price will of course be impacted by the custom work.

KEY SOURING BLEND ADVANTAGES

The advantages of using a souring blend rather than a microbial method of souring include:

- ✓ **SYSTEM AND FOOD SAFETY**
There is no possibility of infecting your systems with microbes and having off or failed batches due to unwanted bacteria in beer batches. **NO RISK SOURING - NO BACTERIA INVOLVED**
- ✓ **SHORTEN BATCH TIME**
Kettle souring can add 24-72 hours to the fermentation time of a batch of beer. Using a souring blend only adds the time to add the blend – normally only minutes and can be done anytime from the kettle to keg.
- ✓ **CONSISTENCY**
The microbes used to sour beers can vary growth rates by small changes in temperature or other parameters in the wort for making beer; microbes also mutate over time and generations. Either of these can cause flavor changes that are often unacceptable. The addition of a souring blend is extremely consistent and repeatable.
- ✓ **SPLIT BATCHES**
A batch of beer can be split and produced as both a sour beer and a non-soured beer.
- ✓ **RECOVERY**
Off batches may have flavors that are not acceptable in a non-sour beer but are acceptable in a sour beer.
- ✓ **FORMULATION**
When setting up formulations, the testing and flavoring can be done at the pitcher or bucket level with no waiting for a full fermentation batch. This means the level of sour can be easily changed just by adding to what you are tasting.
- ✓ **COST**
When compared to the cost of overnighting a strain of microbes and the time it takes to sour the batch, the cost of the souring blend is very inexpensive.



USING BEER SOURING BLENDS IS AN EASY WAY TO INTRODUCE NEW BEERS TO YOUR PRODUCT LINE.



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