



Non-Alcoholic or Low Alcohol Beer Production Technical Sheet

Traditional, large scale non-alcoholic beers are produced using methods such as distillation or very fine membrane filtration. Additional methods, such as using a low alcohol producing yeast strain, can be used. These yeast typically dislike maltose and will produce between 15-25% attenuation depending on the mash recipe.

YEAST SUGGESTIONS:

- WLP603 *Torulaspora delbrueckii*
- WLP604 *Pichia kudriavzevii* - Available upon request, has a 21 day lead time and 1L minimum order requirement.
- WLP618 *Saccharomyces ludwigii* - Available upon request, has a 21 day lead time and 1L minimum order requirement.

SUGGESTED PITCHING RATE:

2 million cells/mL

TIPS AND TRICKS:

- Mash recipe will need to reflect a lower amount of fermentables available for the yeast.
- Yeast will impart lower flavor attributes than traditional brewing strains due to reduced fermentation.
- Hop extracts, flavoring can help reduce off flavors such as a “worty” character.
- Blending can help achieve a beer with a low ABV.
- Small scale trials are suggested to optimize nutrients, yeast, and mash for a lower alcohol fermentation.

SUGGESTED ANALYTICAL LABORATORY TESTING SERVICE:

LS6646 - Alcohol by Volume/Weight



Low Alcohol Pilsner

Brew Method: All Grain

Style Name: German Pilsner

Boil Time: 60 min

Efficiency: 76% (ending kettle)

STATS:

Original Gravity: 1.016

Final Gravity: 1.013

ABV: 0.5%

IBU: 19.19

SRM: 1.44

FERMENTABLES:

German - Pilsner (88.2%)

German - Wheat Malt (5.9%)

German - Caramel Pils (5.9%)

HOPS:

Select depending on your desired flavor profile

YEAST:

WLP603 *Torulaspora delbrueckii*

Flocculation: Medium

Attenuation: 26%

Fermentation Temperature: 10°C

MASH GUIDELINES:

Temperature: 72°C

Time: 60 minutes