

## Best of Show, WIZARDS Mini-Comp, November 2023

### Altbier

5 gallons, all-grain, Anvil Foundry

OG = 1.048 FG = 1.010

IBU = 41 SRM = 16 ABV = 5.3%

### Ingredients

Stone Path Nor'East Pilsner Malt (1.8°L)

1.5 lb. Dark Munich Malt (8.5°L)

8 oz. Melanoidan Malt (35.0°L)

8 oz. Cara Munich II (45.7°L)

4 oz. Carafa Special II (413.0°L)

0.5 oz Warrior hops (60 min.)

0.4 oz. Spalt hops, 4.3% (60 mins)

0.6 oz. Spalt hops, 4.3% (20 mins)

2.2 grams Wyeast yeast nutrient

½ Whirlfloc tablet

SafAle K97 (German Ale)

### Step by Step

Mash Water Profile Ca 42; Mg 15; Na 25; Su 113; Cl 56; target pH 5.4

Mash all grains at 149°F for 60 minutes.

Sparge with 1 gallon water treated with .25 ml 88% lactic acid

Boil the wort for 90 minutes, adding hops at the times indicated in the recipe. Add whirlfloc and yeast nutrient 15 minutes before the end of the boil.

Chill the wort to 62°F, aerate the wort with oxygen, pitch the yeast, and ferment until complete. Keg and carbonate to 2.5 volumes.

### Notes from the Brewer

Brewed in the Anvil Foundry with sparge, your process may vary. I added 1.16 grams chalk to the fermenter for a higher Ca content in the finished beer. Next time, I would try to change the mash water chemistry to achieve a ~20 ppm higher Ca concentration than shown above.