



American Homebrewers Association®

# BIG BREW

## 2021 RECIPE

### Star Gazer Hazy Double IPA

Recipe courtesy Ashton Lewis

Recipe for 5 US gallons (18.9 L)

This hazy double IPA was formulated to showcase the tropical and juicy aromas from BSG Hops' Zamba™ blend and the minty and green-apple aroma notes from German Polaris hops. The grist is typical for the style, with a little boost from sucrose to increase wort gravity without adding non-fermentables or additional malt flavor. The hopping schedule and yeast strain are intended to set the stage for aroma retention and biotransformation while keeping hop bitterness in check. Ashton Lewis, experienced master brewer and national account manager at BSG, says, "The name was inspired by the 2020 Great Conjunction with the use of North Star Pils malt and Polaris (a.k.a. the North Star) hops."

#### Malts & Adjuncts

- 6.5 lb. (2.95 kg) Rahr North Star Pils™ Malt
- 3.25 lb. (1.47 kg) Rahr Red Wheat Malt
- 1.5 lb. (680 g) flaked oats
- 6 oz. (170 g) Weyermann® Acidulated Malt
- 1 lb. (454 g) sucrose @ 60 min

#### Hops

- 0.5 oz. (14 g) Polaris, 20% a.a. @ 60 min (10 AAU)
- 0.5 oz. (14 g) Zamba™, 10% a.a. @ 60 min (5 AAU)
- 1 oz. (28 g) Polaris, 20% a.a., whirlpool/steep at 158 °F (70 °C) (20 AAU)
- 1 oz. (28 g) Zamba™, 10% a.a., whirlpool/steep at 158 °F (70 °C) (10 AAU)
- 1.5 oz. (42 g) Polaris, 20% a.a., dry hop at day 2 (30 AAU)
- 1.5 oz. (42 g) Zamba™, 10% a.a., dry hop at day 2 (15 AAU)
- 1.5 oz. (42 g) Polaris, 20% a.a., dry hop at day 4 (30 AAU)
- 1.5 oz. (42 g) Zamba™, 10% a.a., dry hop at day 4 (15 AAU)

#### Yeast

- Fermentis SafAle K-97, Omega OYL-044 Kolsch II, or Lallemand LalBrew Köln yeast

#### Additional Items

- 1 cup (190 g) corn sugar (if priming in bottles)

#### Brewing Notes

This recipe uses reverse osmosis (RO) water. Add 2 tsp. calcium chloride, ½ tsp. calcium sulfate (gypsum), and ¼ tsp. sodium chloride (non-iodized) to the mash water before mashing-in. Note that acidulated malt is included in the grist bill; mash pH following mashing-in should be about 5.4.

Mash the malts at 154°F (68°C) for 60 minutes. Start recirculating wort. Sparge slowly and collect 6.5 gallons (24.5 L) of wort. Heat to boiling and boil the wort 70 minutes, adding hops at the times indicated in the recipe. Adjust original gravity post-boil with RO water as required.

Chill the wort to 158°F (70°C), add third kettle hop addition, let steep for 10 minutes, and continue cooling wort to approximately 68°F (20°C). Pitch yeast, and ferment between 60 °F and 68 °F (15.5–20 °C) until complete.

Dry hops should be added on day 2 and day 4 of fermentation. If using hop bags for dry hopping, remove bags on day 7; if not, rack to secondary fermenter or keg equipped with spunding valve. Complete fermentation and any hop creep following dry hopping should be finished by about day 21.

Prime and bottle condition, or serve from keg if naturally conditioned during aging.

**Original Gravity:** 1.064 (15.7°P)

**Final Gravity:** 1.012 (3.1°P)

**Approximate Color:** 4 SRM

**Bitterness:** 35 IBU

**Alcohol:** 7% by volume

#### Partial-Mash Version

- 4.4 lb. (2 kg) Briess Light Pilsen Dried Malt Extract
- 3.25 lb. (1.47 kg) Rahr Red Wheat Malt
- 1.5 lb. (680 g) flaked oats
- 1.25 lb. (567 g) sucrose @ 60 min

Perform a mini-mash with the wheat malt and flaked oats at 154°F (68°C) for 45 minutes. The steep method is suggested using a grain bag and 1.5 gallons (5.7 liters) steep water. Remove the grain bag from the steep after 45 minutes, gently pour hot water over the steep bag to improve yield, add dried malt extract, and adjust kettle volume to 6.5 gallons (25 liters). Bring to a boil and follow the remaining recipe as above.

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