

## YCH039 | CRYO POP™ ORIGINAL BLEND

BIOTRANSFORMATION  
JUICY PALE ALE

This Pale Ale recipe relies on Cryo Pop™ and Idaho 7® to load-up the wort with biotransformation potential. Expect dynamic aromas of pine, peach, and tropical fruits.



## SPECIFICATIONS

BATCH SIZE	ORIGINAL GRAVITY	FINAL GRAVITY	IBU	ABV
5 GAL	1.059	1.014	27	5.9%

If using a different brew volume, be sure to recalculate the ingredient quantities to achieve the correct IBU value.

## INGREDIENTS

GRAINS	AMOUNT	HOPS	TYPE	AA%	ADDITION	AMOUNT
Pilsner Malt	10.0 lbs	Cryo Pop™ Blend	Cryo Hops® Pellets	21.6% (41 AAU)	whirlpool	1.90 oz
Malted Wheat	0.5 lbs	Cryo Pop™ Blend	Cryo Hops® Pellets	21.6%	AFDH	2.60 oz
Munich II Malt	0.6 lbs	Idaho 7® Brand	T-90 Pellets	12.3%	AFDH	2.60 oz
Acidulated Malt	0.3 lbs	Citra® Brand	Cryo Hops® Pellets	23.5%	PFDH	1.30 oz

YEAST & ADJUNCTS	AMOUNT
London Ale III Yeast	1 pack
Whirlfloc	Optional
Yeast Nutrient	1 Tbsp

If necessary, adjust the amount of hops according to your actual alpha acid. To do this, use the formula  $AA\% \times \text{Amount (oz)} = \text{AAU}$  to match the original AAU units.

AFDH = Active Fermentation Dry Hop  
PFDH = Post Fermentation Dry Hop

## INSTRUCTIONS

- STEP 1** Perform a step-mash: 144°F/62°C for 20 min, 160°F/71°C for 20 min, mash out at 172°F/78°C. If a step mash is not possible, perform a single infusion mash at 154°F/68°C for 60 min.
- STEP 2** Vorlauf until the wort has cleared and is free of grain particles.
- STEP 3** Runoff into the kettle and sparge with 180°F/82°C water.
- STEP 4** Bring the wort to a boil. Add hops according to schedule.
- STEP 5** With 10 min left for the boil, add Whirlfloc and yeast nutrient.
- STEP 6** After 60 min, turn off the burner and add the whirlpool hop additions.
- STEP 7** Gently create a whirlpool in the kettle.
- STEP 8** Quickly cool the wort to 68°F/20°C, aerate with O<sub>2</sub>, and transfer into a sanitized fermenter.
- STEP 9** Pitch the yeast and add either an airlock or blowoff tube to the fermenter.
- STEP 10** Add the active-ferm dry hops in the middle of fermentation with approximately 4-6°P left before terminal gravity.
- STEP 11** After terminal gravity has been reached, add the post-ferm dry hops for 2 days at 72°F/22°C.
- STEP 12** After 2-3 days and the beer has passed forced diacetyl test, cool the fermenter to 32°F/0°C. Carbonate to 2.5 vol. CO<sub>2</sub>.

