



HAMMERHEAD IPA

BREW DAY

Stage/Time	Type	Qty	Name	%AA	IBU
Boil/60 min	Hop	1 oz	Warrior	16%	51.6
Boil/15 min	Extract	7 lb	Pilsen Light DME	-	-
	Sugar	1 lb	Corn Sugar		
	Clarifier	1 tab	Whirlfloc	-	-
	Nutrient	1 tsp	Yeast Nutrient	-	-
Whirlpool	Hop	2 oz	Mosaic	12.2%	3.7
		2 oz	Strata	12%	3.6

**American IPA** (21A)Original Gravity: 1.056 – 1.070 SGFinal Gravity: 1.008 – 1.014 SGBitterness: 40 – 70 IBUsABV: 5.5 – 7.5%SRM: 6 - 14

Overall Impression: A decidedly hoppy and bitter, moderately strong American pale ale, showcasing modern American or New World hop varieties. The balance is hop-forward, with a clean fermentation profile, dryish finish, and clean, supporting malt allowing a creative range of hop character to shine through.

FERMENTATION AND BEYOND

Stage	Type	Qty	Name	Notes
Pitch	Yeast	1 pkg	SafAle US-05 or WLP001 California Ale	Ferment 68-72°F
Dry Hop	Hop	3 oz	Mosaic	58°F
		3 oz	Strata	3 days ⇒ bottle

TARGET STATS

Batch Size	5 gal
Original Gravity	1.061
Final Gravity	1.011
~%ABV	6.6
IBU	59
SRM	3

BREW NOTES

Boil Duration	60 min
Whirlpool Temp	180°F
Whirlpool Time	10 min
Dry Hop Duration	3 days

Notes

Whirlpool duration and temperature can make a difference with the final bitterness of a beer. With this recipe, add your hops and allow them to steep for 10 minutes before beginning the cooldown.

QUICK BREWING INSTRUCTIONS

PREP	Measure out all your ingredients ahead of time: - 3 gallons of water in your boil kettle - 3 gallons of sanitized, pre-chilled water in the fridge - All boil additions, ideally marked with their appropriate timings Pour pre-milled grain into a steeping bag and tie the top of the bag into a knot.	
BOIL	The purpose of your boil is to: [1] to sanitize, [2] to extract bitterness (alpha acids) from hops, and [3] to break down particulates for a clearer finished product. The total boil time is largely determined by how bitter you intend the beer to be. The extract only needs to be boiled long enough to sanitize and break down particulates, which is why our recipes usually add extracts in the last 15 minutes of the boil. 1. Once your steep is complete and the grain bag is removed, begin heating your pot to a boil. 2. Once you achieve a stable rolling boil, start your timer for the total boil time (see recipe) and begin adding your additions at the appropriate times. With each addition, be sure to add slowly and keep an eye out for boil-overs. 3. In between additions, you should take the opportunity to make a bucket for sanitizing any equipment that will contact your unfermented beer (called “wort”) after the boil. a. Measure out 5 gallons of water in your fermentor and add 1 oz of sanitizer. If you haven’t already, be sure to mark your fermentor at the 5 gallon level for later. b. After about a minute, transfer the solution into a bucket to sanitize the rest of your equipment (e.g. funnel, airlock, stopper, wine thief, etc.) Note: If it’s a glass fermentor, do not pick it up and attempt to pour it out; use a siphon to transfer the liquid safely. 4. With 15 min left of the boil, turn off the heat to the pot. Slowly add your malt extract, constantly stirring to ensure that it is completely dissolved. When clumps are no longer visible, turn the heat back on to resume boiling. At this point, boil-overs are much more likely, so have countermeasures ready. When the foam begins to rise rapidly: a. Be prepared to turn the heat down or off. b. Have a spray bottle of water ready to help keep the foam at bay. c. If the foam does not re-incorporate into the wort on its own, the heat is too high. 5. Add any further additions at the appropriate times and begin preparing your cooldown bath.	60 MIN • 1 oz Warrior
	Note: If it’s a glass fermentor, do not pick it up and attempt to pour it out; use a siphon to transfer the liquid safely.	15 MIN • 7lb Light DME • 1lb Corn sugar • Clarifier & Nutrient
	With 15 min left of the boil, turn off the heat to the pot. Slowly add your malt extract, constantly stirring to ensure that it is completely dissolved. When clumps are no longer visible, turn the heat back on to resume boiling. At this point, boil-overs are much more likely, so have countermeasures ready. When the foam begins to rise rapidly: a. Be prepared to turn the heat down or off. b. Have a spray bottle of water ready to help keep the foam at bay. c. If the foam does not re-incorporate into the wort on its own, the heat is too high.	WHIRLPOOL • 2 oz Mosaic • 2 oz Strata
COOLDOWN	Now that your boil has concluded, everything that touches your wort must be sanitized. Cooling your wort down to pitchable temperatures is important to improve clarity and to reduce the chances of bacterial infection. 1. Transfer the hot kettle from the burner to a sink or tub filled with cold water. Carefully swirl the pot to better cool the wort inside. Note: Do not add ice at this time. Cold tap water should be enough of a contrast to rapidly cool your near-boiling wort to more manageable temperatures. Save the ice for the hard part (i.e. getting from 120°F to 80°F or lower). 2. As the water becomes hot, refill your tub with cool water until the wort gets below 150°F. At this point adding ice to the bath can help cool the wort to target more quickly. 3. Once your wort has cooled to 80°F or less, vigorously pour it into your sanitized fermentor. Add the prepared, sanitized cold water (refrigerating the water as suggested in the prep stage will help to cool your wort even further) to the fermentor until the total volume has reached 5 gallons. Shake the carboy for a few minutes to oxygenate and to evenly mix the water with your wort. Now is the time to take a hydrometer reading and record your Original Gravity measurement.	
PITCH	Adding your yeast is what changes the liquid in your fermentor from “wort” to “beer.” 1. Sanitize the exterior of the yeast package as well as any tools used to open it. 2. Add your yeast to the fermentor and seal with an airlock and stopper—being sure to fill the airlock to the appropriate mark with sanitizing solution. 3. Store in a cool dark place for the duration of fermentation.	SafAle US-05 American Ale - or - WLP001 – California Ale Yeast <i>Ferment at 68°F</i>
DRY HOP	The dry hop stage comes after fermentation is complete. Unlike hops adding during the boil, dry hop additions contribute only hoppy aroma—not bitterness—to the finished beer. To maximize retention, wait until fermentation activity (i.e. bubbling in the airlock) has ceased. 1. Remove your airlock and pour your dry hop additions directly into the beer. Replace the airlock. 2. Some recipes have more than one hop addition, add any subsequent additions at the appropriate times.	• 3 oz Mosaic • 3 oz Strata <i>Package after 3 days</i>