If you are a fan of craft beer, a recipe like this one is likely very familiar to you. The classic American Pale Ale gave rise to what we consider craft beer today, and many define it to be the original American craft beer style. Perfectly balanced malt and hop character paired with a clean fermentation profile gives this recipe rich flavor, moderate bitterness and an approachable alcohol content while maintaining supreme drinkability and satisfaction.

**BREWING DAY**

**PALE ALE**

**PREPARE**

Before getting started, ensure you have the following equipment and ingredients from your kit on hand:

**BREW DAY EQUIPMENT**

- Fermentor w/spigot
- Fermentor lid
- Airlock and bung
- Recipe kit
- Cleanser - 1 packet
- Additional equipment not included in kit:
  - Large pot or kettle w/lid
  - 2 gallons (8 quarts) or larger
  - 10 lbs of ice
  - approx 2 bags
  - Large bucket or container for equipment cleansing
  - Scissors
  - Plastic or metal mixing spoon
  - Kitchen towel

**BREW DAY INGREDIENTS**

- Premium grains:
  - 2 oz Caramel 40L
- Premium fermentables:
  - 1 lb Golden light dry malt extract
- Premium hops:
  - 10.5g Cascade hops
- Yeast: 4g Active brewing yeast - American ale

**GETTING READY**

- Install the spigot on the fermentor and add 1 gallon (to the 4th graduation mark of the fermentor) of water to check the fermentor for leaks.

- Identify and clear your fermentation area. Ideally this is a location out of direct light with a steady temperature around 68-75 degrees.

**BOIL**

1. Add 1.25 gallon of water to the kettle and heat over medium heat.
2. Over a sink or trash can, hold mesh bag open and pour in the grains. Tie the open end in a knot leaving room for the grains to be loose.
3. Steep the grain bag in the water while it heats for 20 minutes.
4. After 20 minutes, remove the steeping bag from the kettle allowing the liquid to drip from the bag, but do not squeeze. Discard grain bag.
5. Turn heat to high and bring to a boil uncovered.
6. Once boiling, remove from heat.
7. Slowly pour in 1 lb golden light dry malt extract, stirring to dissolve as you pour. Congratulations, you have now made wort, the brewer’s term for unfermented beer.
8. Return the pot to the stove and turn on HIGH. Carefully watch the pot to ensure foam does not build and overflow (called a boil-over). If foam begins to build, reduce the heat and stir the wort until it subsides.
9. Over the next 45 minutes, you are going to add hops to the wort at specific times in order to build the desired flavor and bitterness for this recipe. Leave the pot uncovered and maintain a low, rolling boil, adjusting the heat as necessary. Watch carefully for boil-overs, particularly after hop additions.

Set your timer for 45 minutes and start it. At the following times, add the prescribed hops and stir:

- At the beginning of the boil, add 7g Cascade hops
- With 10 minutes remaining, add 3.5 g Cascade hops

10. When the timer goes off, the boil is complete. Turn off the heat and cover the pot.
11. From this point forward, anything that comes in direct contact with the wort must be properly cleansed to avoid contamination that could ruin your beer.

**COOLING**

12. Place the covered kettle in sink.
13. Fill sink with ice and cold water up to the height of the wort in the kettle.
14. Chill the wort for 30 minutes to bring it to room temperature.
15. While the wort cools, move to the next step to prepare your equipment.

**DECONTAMINATE**

16. Everything that comes into contact with the wort after the boil needs to be cleansed.
17. Fill the fermentor with warm water and 1 packet of cleanser. Put the lid on and cover the opening and shake to dissolve. Let this rest for 2-3 minutes to cleanse the fermentor. Save the other packet for bottling day.
18. Gather a bucket or storage container large enough to fit the bung, airlock, and scissors. Place the equipment in the bucket.
19. Pour the cleanser into the bucket, submerging the equipment listed to cleanse all surfaces. Let this rest for 2-3 minutes to cleanse the equipment.
20. Keep equipment in the cleanser bucket until ready to use.

TRANSFER
21. When the wort has finished cooling, remove the kettle from the ice bath and pour the contents into the fermentor.
22. Fill up to the one gallon mark on the fermentor, being careful to leave the sludge behind in the kettle.
23. If the wort is below the one gallon mark, top off the fermentor with cool water to reach this point.

PITCH YEAST
24. Cut open yeast pack with the cleansed scissors.
25. Sprinkle the yeast on the surface of the wort.
26. Seal the fermentor with the lid and bung.
27. Fill the airlock with cleanser solution to the fill line and insert the airlock into the bung.

CLEAN UP/STORE
28. Clean up all your components and store them for the next brew day.

FERMENT
29. Move the fermentor to a location that does not receive direct sunlight and maintains a steady temperature between 65° and 75°.
30. Within a few days, bubbles may start forming in the airlock, or a thick foam may rise from the surface of the wort. This is a normal part of the fermentation process.
31. Allow fermentation 14 days to complete.

BOTTLEING DAY

EQUIPMENT CHECK

BOTTLEING DAY EQUIPMENT
• Filled fermentor
• 1 Packet cleanser
• Table sugar
• 1/2 tsp measuring spoon

ADDITIONAL REQUIRED EQUIPMENT NOT INCLUDED IN KIT:
• Large bucket for equipment cleansing
• Ten 12 oz. pry-off style beer bottles
• Bottle capper & caps

GETTING READY
32. 30 minutes before starting the process, gently move your fermentor to an elevated position, like the edge of a counter, next to your sink, or tabletop.

DECONTAMINATE
33. Reminder, everything that comes into contact with the wort after the boil needs to be cleansed.
34. Gather a bucket or storage container large enough to fit the bottles and caps.
35. Dissolve the remaining packet of cleanser in warm water in the bucket.
36. Soak bottles in cleaner solution, ensuring contact with all surfaces for 2-3 minutes.
37. Keep the bottles and caps in the cleaner bucket until ready to use. Once ready, drain the bottles. Rinsing is not required.

BOTTLEING
38. Carefully add 1/2 tsp. table sugar to each cleansed bottle. This sugar will feed the remaining yeast as they carbonate the beer.
39. Remove the airlock from the fermentor.
40. With a bottle held under the spigot, slowly open the spigot to fill the bottles. Try to flow the beer into the bottles as gently as possible.
41. Fill the bottle approximately 1" form the top, which will leave the proper headspace in the neck of the bottle.
42. Affix a cap on top of the bottle with a bottle capper and set aside.
43. Repeat the bottle filling step until there is no beer left in the fermentor.

CLEAN UP/STORE
44. Rinse all used equipment with warm water or cleanser and allow to fully dry before storing in a dry location until the next brew day.

CARBONATION
45. Store the bottles in a dark area at 65°-75° for at least 2 weeks to carbonate.
46. After two weeks, the bottles can be stored in a cold location.

SHARE, ENJOY!
47. When chilled, the bottles are ready to serve.
48. Pour gently into a clean glass, taking care to leave the layer of sediment at the bottom of the bottle behind. Cheers!

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