

NORTHERN BREWER

Sierra Madre Pale Ale (1 Gallon Homebrew Recipe Kit)

More than any other, this widely-imitated West Coast American Pale Ale is responsible for bringing craft beer into the national consciousness and re-introducing America to real beer. Now it's a classic. Decidedly clean, firmly hoppy, and drinkably bitter, this isn't an ale that feels the need to jump up and down and scream for your attention. From Chico, California to all points of the compass, whether you're pairing it with Mexican, burgers and fries, or just conversation, there's always a good time and a place for a good, basic pale ale. These instructions are a simple, walkthrough of the brewing process. For more information, please refer to the instructions and how-to DVD included with this starter kit.

Brew Day:

If you're brewing for the first time, don't worry, we've got you covered. We understand that the process can appear to be a bit intimidating. We've taken our years of experience and put together the ultimate package of materials to make your brew day simple, fun and trouble free.

Sharing our passion for home brewing is a priority for us. We are committed to making your brewing experience a success and adding another home brewer to our family.

First step. WATCH THE VIDEO! Our brewmasters will take you through brew day, step by step. And it's not just an informational video, it's entertaining as well. Watch it!

Next. Familiarize yourself with the laminated instruction sheet included with your Starter Kit. The illustrations and tips on that sheet make the steps even easier to understand and follow.

Finally, read through the detailed directions below. These are more detailed than those on the laminated instruction sheet. Pay particular attention to steps 4 & 9. They refer to the specific extract, hops and yeast used to create this beer.

Once you've done the three things above you're ready to brew! But we warn you, home brewing is addictive.

Now we're ready to brew

You will need: recipe kit, kettle, 1 gallon fermentation jug, airlock, screw cap, blowoff tube, Auto-Siphon and hose, sanitizer solution, scissors

Your Sierra Madre Pale Ale Kit Includes:

- Steeping grains and mesh bag

Steep approx. 10 minutes—Brew Day, step 2

- 1.5 lbs. Northern Brewer Gold malt extract syrup

Boil for 45 minutes—Brew Day, step 4

- 3.5 grams Centennial Type hops

Boil for 45 minutes—Brew Day, step 4

- 3.5 grams German Perle hops

Boil for 20 minutes—Brew Day, step 4

- 10.5 grams Cascade hops (1 ea. 7 gr. & 3.5 gr. packet)

Boil for 0 minutes—Brew Day, step 4

- Safale US-05 brewer's yeast

Add HALF packet to cooled wort—Brew Day, step 9

- Northern Brewer "Fizz Drops" carbonation tabs

Add one per 12 oz. bottle—Bottling Day, step 18

1. Collect and heat 1.25 gallons of water in your kettle. Any good-quality drinking water will work for our purposes—if the water tastes OK, it will make good beer.

2. Steep grains in the mesh bag. Just think of this as making tea with barley malt—steep for approximately 10 minutes as the water heats, then remove the grain and discard. These grains will add desired color, flavor, aroma, and body to our finished beer.

3. Bring the liquid to a boil. We now have wort (brewing term for unfermented beer). Crank up the heat and bring it to a boil.

4. Boil the wort for 45 minutes total, with the following additions and times:

- A. Add the malt extract syrup (1.5 lbs. Gold) and the first hop addition (3.5 grams Centennial Type) at the beginning of the boil; stir to dissolve and boil for the full 45 minutes.

- B. 25 minutes after the malt extract and first hop addition, add the second hop addition (3.5 grams German Perle) and boil for 20 minutes.

- C. 20 minutes after the second hop addition, the 45 minute boil ends—turn off the burner and add the fourth and final hop addition (10.5 grams total Cascade hops—1 ea. 7 gram & 3.5 gram).

5. Cool the wort. Fill a sink with cold water and ice, then put the covered kettle in the ice bath. The goal is to cool the wort to approx. 60-70° F—the kettle should be cool to the touch. Our yeast will be happiest at these temperatures.

6. Sanitize the gear. While the wort cools down, sanitize the 1 gallon fermenting jug, airlock, screw cap, Auto Siphon and hose, PLUS the yeast pack and a pair of scissors.

7. Siphon the cool wort from the kettle into the jug. There will be some trub (naturally-occurring but gross-looking hop-malt sludge) at the bottom of the kettle—try to leave this behind.

NOTE: Make sure you do not fill the jug higher than the "ONE GALLON" raised lettering. The yeast needs a little room to work. If the foam starts to push through the airlock, slowly remove the airlock and replace it with the length of smaller diameter tubing.

8. Aerate the wort. Cover the fermenter with the sanitized screw cap and gently rock back and forth for a few minutes to slosh the wort and mix some air in—yeast cells need some oxygen for a healthy fermentation.

9. Add HALF of the yeast packet. Use the sanitized scissors to cut open the yeast pack and pour HALF of it into the wort in the jug (you can discard the remainder, or use it to bake beer bread—just don't use it for beer).

10. Seal the fermenter. Either fill the sanitized airlock with approx. 1 tbs. sanitizer solution or tap water, and fit the airlock into the hole in the screw cap; or insert the length of smaller diameter tubing into the hole in the screw cap, with the other end submerged in a small glass of water ... then pour yourself an end-of-brew-day beer.

11. Move the fermenter to a dark, quiet spot until fermentation begins.

Tip: Your Sierra Madre will ferment happiest at a temperature of 60-75° F.

Fermentation:

12. Fermentation begins. Within a day or so of Brew Day, fermentation begins—as yeast cells convert malt sugars into CO₂ gas and alcohol, you will notice bubbles come through the airlock and a cap of frothy foam form on the beer.

13. Fermentation ends. Roughly one to two weeks

from Brew Day, fermentation will end—the exact timing depends a lot on temperature and also on wort biochemistry that we won't worry about right now. Don't be alarmed if it takes a few less or a few more days—brewing is an art as well as a science, and your beer will be fine. When the supply of malt sugars in the wort is depleted, the yeast cells

begin to go dormant and sink to the bottom of the fermentor. Bubbles come through the airlock very infrequently or stop entirely, and the cap of foam starts to subside or disappears. If you have it attached, remove the blowoff tubing once things have settled down, and replace it with the airlock until you're ready to bottle.

Bottling Day:

(2 weeks after Brew Day)

You will need: Auto Siphon & hose, bottle filler, bottle caps & capper, sanitizer solution, 1 dozen clean 12 oz. pry-off beer bottles

Two weeks after Brew Day, your beer is ready to bottle. There's a lot going on during bottling day—a second set of hands is a big help ... and can usually be paid in beer!

14. Move the fermentation jug to a table or countertop. Do this early, so the yeast and sediment has a chance to re-settle!

15. Sanitize the gear. Namely the Auto siphon & hose, bottle filler, all of the bottles, about 20 bottlecaps (you won't need them all, but may need extras in case a couple drop on the floor). Refer to the beginning of this document if you need a refresher on sanitizing!

Tip: Use a clean plastic tub or bucket, or your boil kettle, to mix the sanitizer solution and sanitize all the gear—don't dump the solution out right away, in case you need to re-sanitize a piece of equipment during the bottling process!

16. Connect one end of the hose to the Auto siphon, and the other end of the hose to the bottle filler.

17. Start the siphon and fill the bottles. Remove the airlock and stopper from the jug and place the Auto-Siphon into the beer; while holding down the bottle filler to keep the valve open, have your helper pull up, then push down on the siphon piston to begin the flow of beer. Just lift up on the filler to stop the flow of beer. Try to leave about 1" of headspace in each bottle.

Tip: Stop filling when the liquid level is just about to spill over—when you pull the filler out, you'll have the perfect amount of headspace.

18. Add one Fizz Drop tablet to each bottle. This small charge of sugar will carbonate (or "prime") our flat beer—the CO₂ gas created by this mini-fermentation will be absorbed by the liquid since it can't escape the sealed bottle—thanks, science!

19. Cap the bottles. Put a sanitized bottlecap on a filled bottle. Center the bell of your bottlecapper on the cap, and push down on the levers, then release. The cap should be crimped tightly.

Repeat Steps 4-6 about dozen times ... now is when a helper really earns his or her keep!

Conditioning and Enjoying:

(2 weeks after Bottling Day)

You will need: a little more patience, your favorite beer glass, appreciative friends

20. Wait just a little longer! It'll be worth it—promise. Keep the filled, capped bottles at room temperature for approx. 1-2 weeks to let the beer carbonate.

What's happening: Because our beer is natural and unfiltered, there will always be a few yeast cells hanging around, and just like in primary fermentation, these remaining cells will consume the small dose of priming sugar and convert it to a little bit more alcohol and just enough CO₂ gas to

add some fizz. Because we're using yeast fermentation to naturally carbonate the beer, the exact timing of this step is squishy; 7 to 14 days is a safe bet, but don't be dismayed if it takes a little less or more time.

Test a bottle at one week—did it hiss when you opened it? If not, wait a week and try again. After this point, the bottles can be stored cold and upright.

21. Imbibe! As if we really need to tell you how to do this! Assemble your tasting panel, clean your favorite beer glass, and crack open a bottle

of fresh, handcrafted beer. Decant the beer into your glass.

Tip: The fermentation we used to naturally carbonate the beer will leave a thin layer of yeast at the bottom of the bottle—leave this behind when you pour for maximum clarity ... or pour it on in for an extra dose of vitamin B12!

Admire the appearance, savor the aroma, discuss with your friends, and then enjoy a sip ... homebrewer!

Cheers!

We're sure that you'll enjoy homebrewing and love the beer that you make.

If you have any questions along the way, please give us a call at:

1.800.681.BREW, 9am-6pm CST, any day of the week.

If you're curious we also suggest that you check our video library at northernbrewer.com

The library is full of "how-to" videos on different brewing techniques, products & interviews with homebrewing experts.