

AMERICAN LAGER

Official NORTHERN BREWER Instructional Document

These are among the most difficult beers to brew because their pale color, low hop rate, and delicate flavor don't hide flaws. The best course of action is to pick a proven recipe and ferment it at the appropriate temperature! Our American Lager's body and flavor are lightened by rice, and yields a straw-colored and clear beer with a snowy head.

O.G.: 1.039 READY: 2 MONTHS

2 weeks primary, 4 weeks secondary, 2 weeks bottle conditioning

KIT INVENTORY:

FERMENTABLES

- 3.15 lbs Gold malt syrup
- 2 lbs Rice Syrup Solids

BOIL ADDITIONS

- 1 oz Saaz (60 min)

YEAST

- **WYEAST 2007 PILSEN LAGER YEAST.** A classic American pilsner strain, smooth, malty palate. Ferments dry and crisp. Apparent attenuation: 71-75%. Flocculation: medium. Optimum temp: 48°-56° F.
- **DRY YEAST ALTERNATIVE:** Saflager S-23 Lager Yeast. Optimum temp: 50-57° F

These simple instructions are basic brewing procedures for this Northern Brewer extract beer kit; please refer to your starter kit instructions for specific instructions on use of equipment and common procedures such as siphoning, sanitizing, bottling, etc.

For more detailed extract brewing instructions, please visit www.northernbrewer.com

BEFORE YOU BEGIN ...

MINIMUM REQUIREMENTS

- Homebrewing starter kit for brewing 5 gallon batches
- Boiling kettle of at least 3.5 gallons capacity
- A 5 gallon glass carboy, with bung and airlock, to use as a secondary fermenter
- Approximately two cases of either 12 oz or 22 oz pry-off style beer bottles

UNPACK THE KIT

- Refrigerate the yeast upon arrival
- Locate the Kit Inventory (above) - this is the recipe for your beer, so keep it handy
- Doublecheck the box contents vs. the Kit Inventory
- Contact us immediately if you have any questions or concerns!

PROCEDURE

A FEW DAYS BEFORE BREWING DAY

1. Remove the liquid Wyeast pack from the refrigerator, and "smack" as shown on the back of the yeast package. Leave it in a warm place (70-80° F) to incubate until the pack begins to inflate. Allow at least 3 hours for inflation; some packs may take up to several days to show inflation. Do not brew with inactive yeast - we can replace the yeast, but not a batch that fails to ferment properly. If you are using dry yeast, no action is needed.

2. Prepare a yeast starter. Follow the Yeast Starter Kit instructions. Allow the starter to incubate for at least one day.

ON BREWING DAY

3. Collect and heat 2.5 gallons of water.

4. Bring to a boil and add 3.15 lbs Gold malt syrup and 2 lbs Rice Syrup Solids. Remove the kettle from the burner and stir in the Gold malt syrup and Rice Syrup Solids.

5. Return wort to boil. The mixture is now called "wort", the brewer's term for unfermented beer.

- Add 1 oz Saaz hops, and boil for 60 minutes.

6. Cool the wort. When the 60-minute boil is finished, cool the wort as close to 56° F as rapidly as possible. Use a wort chiller, or put the kettle in an ice bath in your sink.

7. Sanitize fermenting equipment and yeast pack. While the wort cools, sanitize the fermenting equipment - fermenter, lid or stopper, fermentation lock, funnel, etc - along with the yeast pack and a pair of scissors.

8. Fill primary fermenter with 2 gallons of cold water, then pour in the cooled wort. Leave any thick sludge in the bottom of the kettle.

9. Add more cold water as needed to bring the volume to 5 gallons.

10. Aerate the wort. Seal the fermenter and rock back and forth to splash for a few minutes, or use an aeration system and diffusion stone.

11. Measure specific gravity of the wort with a hydrometer and record.

12. Add yeast once the temperature of the wort is as close to 56°F as possible. Use the sanitized scissors to cut off a corner of the yeast pack, and carefully pour the yeast into the primary fermenter.

13. Seal the fermenter. Add approximately 1 tablespoon of water to the sanitized fermentation lock. Insert the lock into rubber stopper or lid, and seal the fermenter.

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

BEYOND BREWING DAY, WEEKS 1-2

15. Active fermentation begins. Within approximately 48 hours of Brewing Day, active fermentation will begin - there will be a cap of foam on the surface of the beer, the specific gravity as measured with a hydrometer will drop steadily, and you may see bubbles come through the fermentation lock. The optimum fermentation temperature for this beer is 48-56° F - move the fermenter to a warmer or cooler spot as needed.

16. Active fermentation ends. Approximately two weeks after brewing day, active fermentation will end. When the cap of foam falls back into the new beer, bubbling in the fermentation lock slows down or stops, and the specific gravity as measured with a hydrometer is stable, proceed to the next step.

17. Transfer beer to secondary fermenter. Sanitize siphoning equipment and an airlock and carboy bung or stopper. Siphon the beer from the primary fermenter into the secondary.

BEYOND BREWING DAY—SECONDARY FERMENTATION

18. Lagering. Slowly lower the temperature of the beer to as close to 35-40° F as your equipment allows. The best method is to lower the temperature by a couple of degrees each day until the target temperature is reached. Allow the beer to condition in the secondary fermenter for 4 weeks before proceeding with the next step. Timing now is somewhat flexible.

BOTTLING DAY—ABOUT 6 WEEKS AFTER BREWING DAY

19. Sanitize siphoning and bottling equipment.

20. Mix a priming solution (a measured amount of sugar dissolved in water to carbonate the bottled beer). Use the following amounts, depending on which type of sugar you will use:

-- Corn sugar (dextrose) 2/3 cup in 16 oz water.

-- Table sugar (sucrose) 5/8 cup in 16 oz water.

21. Siphon beer into bottling bucket and mix with priming solution. Stir gently to mix—don't splash.

22. Fill and cap bottles.

2 WEEKS AFTER BOTTLING DAY

23. Condition bottles at room temperature for 2 weeks. After this point, the bottles can be stored cool or cold.

24. Serving. Pour into a clean glass, being careful to leave the layer of sediment at the bottom of the bottle. Cheers!