



## Pure Mitten Hops Pale Ale

### Ingredients

6.6 lbs Golden Light Liquid Malt (Late Extract Addition) \_\_\_\_\_  
1.0 lbs Golden Light Dried Malt \_\_\_\_\_

### Steeping Grains:

- 1.00 lb. Crystal Malt 80L \_\_\_\_\_

1.00 oz. Pure Mitten Farms Cascade Hops \_\_\_\_\_  
1.00 oz. Pure Mitten Farms Mackinaw Hops \_\_\_\_\_  
1.00 oz. Pure Mitten Farms Vojvodina Hops \_\_\_\_\_  
1 Package US-05 Ale Yeast \_\_\_\_\_  
Muslin Bag \_\_\_\_\_  
Bottle Caps \_\_\_\_\_  
Priming Sugar \_\_\_\_\_

### Directions

\* **Read all recommended procedures and material before you begin to brew.**

\* **All equipment must be cleaned and sanitized prior to brewing. It is especially important to clean and sanitize the equipment that comes in contact with your beer after it has been boiled. It must be properly sanitized or you risk affecting the taste and quality of your beer. Please call us if you have any questions or our uncertain about sanitizing. Please make sure your kit contains, malt extract, hops, corn sugar, and yeast before brewing.**

### **Brewing**

1. Fill your brew pot with 2.5 gallon of clean water. Heat water to 152 F.
2. Place the steeping grains inside a muslin bag and tie securely. Add the bag to the brew pot for 30 minutes. Maintain 152 F (Do Not Boil). After 30 minutes remove the bag and let drain in to brew kettle. Do not squeeze the grain bag. Discard muslin bag with spent grains.
3. Turn off heat and add all of the 1lb bag of dried malt extract. Stir the extract into the hot water to create your wort. Once the extract is dissolved, bring the wort to a rolling boil.
4. Add 1.0 oz of Mackinaw hops to the boiling wort. Do not let the wort boil over your pot. Boil for 30 minutes.
5. Add 1.00 oz of Cascade hops. Boil for 15 minutes.
6. **Add 6.6 lbs of liquid malt extract (3.3lb canister x 2). Incorporate malt extract into the solution by stirring.** Then add 1.00 oz of Vojvodina hops. Boil for 15 minutes then turn of heat.
7. Cool your boiling pot filled with wort by placing it the your sink filled with cold water. Add ice to the water around the pot to accelerate the cooling process. Also stir the wort periodically. When not stirring keep the lid on your brew pot. Replace the water around your pot with cold water when it becomes warm. Continue to cool the wort until it reaches 80°F. This should take at least 20 minutes. A copper wort chiller can also be used to cool your wort. Ask us about purchasing one if you would like.
8. Pour your wort into the sanitized fermenter. Top off the wort with cold water to the 5 gallon mark. Make sure it is 60-70°F before you sprinkle (pitch) the yeast on top of the wort. Stir with a sanitized spoon or paddle.
9. Place the sanitized lid on your fermenter making sure that it is locks securely. Now place your airlock, which has been sanitized and left half filled with sanitizing solution, into the lid.
10. Shake or rock your sealed fermenter for about 5 minutes for aeration.

## Pure Mitten Hops Pale Ale Specs

**ABV: 5.70%**

**IBU's: 53**

**Original Gravity (OG): 1.057**

**Final Gravity (FG): 1.015**

**Color: Amber**



11. Reopen your fermenter and remove about 8 oz. of wort with a sanitized cup or beer thief. Do not touch the wort in the fermenter with your hands. Take the wort sample and pour it into your test jar with the hydrometer in it until it floats. Record the specific (original) gravity and the potential alcohol readings. If wort is too foamy to record accurately, set aside until it settles.
12. Place the fermenter in a relatively warm place (60-70 deg F). This is the ideal temperature range for ales to ferment at. You should see evidence of fermentation (bubbling airlock) within 12-36 hours. Not all fermentation behaves the same, and depends on factors such as temperature, yeast strain, and amount of fermentable sugar. Note: Cooler temperatures mean slower fermentation. Do not hesitate to call us or stop by if you have any questions.
13. 7-10 days after brewing transfer your beer to a secondary fermenter (carboy) if you have one. Secondary fermentation is not necessary, but does improve the clarity and flavor of your beer. If you do not have a secondary fermenter then allow beer to stay in the primary for this 7-10 days. Open your fermenter and remove a sample of your beer (8oz.) with a sanitized cup or beer thief. Record your specific gravity and potential alcohol readings. Repeat this step every day until your readings stay the same for two days. This ensures that your fermentation is complete. If you are unsure error on the side of caution and wait a few days. Once you are sure that fermentation is complete you can determine the alcohol content of your beer by subtracting the first potential alcohol reading from your final reading ( $8.0\% - 1.5\% = 6.5\%$ ). Now its time to bottle.

## **Bottling**

1. Clean and sanitize all your bottles. You will need about 48 12oz. bottles or 27 22oz. bottles with non screw off caps. They can be purchased at O'Connor's or saved from your personal drinking stash.
2. Boil about 8oz. of water with your 5oz. of priming sugar for 10 minutes & stir until dissolved. Add this hot solution to your bottling bucket.
3. Siphon your beer from the fermenter to the bottling bucket. Try to leave as much sediment behind on the bottom of the fermenter. Gently stir to mix your sugar solution with your beer.
4. Place your bucket on a table. Remove the hose from the siphon unit, sanitize it then attach it to the spigot on your fermenter. Next attach the bottle bottle filler to the other end of the hose. Open the spigot and allow the beer to fill the hose. Fill each bottle by pressing the bottle filler to the bottom of each bottle. When the beer reaches the top of the bottle pull the bottle filler out of the bottle. When this is done it should leave the correct amount of head space in the bottle.
5. Sanitize your caps by soaking them in your sanitizing solution. To cap place a cap on each bottle and crimp with your capping device. Do not apply too much pressure; just let the capper do the work.
6. Natural carbonation occurs as a result of the suspended yeast in your beer consuming the priming sugar. Allow the beer to carbonate at room temperature (60-70 deg F) for about 10 days before refrigerating. Additional aging will improve the clarity and flavor of your beer. **ENJOY!**