INGREDIENTS
FERMENTABLES
6.0 lbs Light LME
1.0 lb Brewers Malt (Packaged with the specialty grains)

SPECIALTY GRAINS
1.0 lb Crystal 80 Malt

HOPS
1.00 oz Northern Brewer (Bittering)
0.50 oz Northern Brewer (Flavoring)
0.50 oz Northern Brewer (Finishing)

FININGS
1 tsp. Irish moss

YEAST
Wyeast 2112°

Recommended Procedures

BREW DAY (Date ____ /____ /____)

1. READ: Read all of the recommended procedures before you begin.
2. ACTIVATE YEAST: If using Wyeast liquid yeast, activate the yeast at least 5 hours prior to pitching.
3. SANITIZE: Thoroughly clean and sanitize ALL brewing equipment and utensils that will come in contact with any ingredients, wort or beer.
4. STEEP GRAINS: Place enough water into a pot to cover specialty grains. Heat to 150°. Pour crushed grains into grain bag and tie a loose knot at the top of the bag and place in water. Steep for 30 minutes. DO NOT BOIL THE GRAINS. Remove bag and allow it to drain into the pot (do not squeeze). Sparge (slowly run water through) the grains with 2 gallons of 168° water. Discard the grain filled bag. Your water is now wort.
5. START BOIL: If needed, add enough water to bring to 3 gallons. Bring your wort to a gentle, rolling boil. Add 1/2 of the malt extract. Continuously stir the extract into the wort as it returns to a gentle, rolling boil.
6. ADD HOPS AND INGREDIENTS: Place hops the provided hop bag and clip to the side of the pot. Do not tie shut as the same bag will be used for each hop addition. Be careful not to let the wort boil over the pot. Using the provided BREW DAY SCHEDULE, note the time the bittering hops were added. Continue the gentle, rolling boil.

BREW DAY SCHEDULE
1. Add bittering hops ____:____ (time)
2. Boil 45 minutes
3. Add Flavored Hops & Irish moss ____:____ (time)
4. Boil 10 minutes
5. Add remaining malt extract ____:____ (time)
6. Boil 5 minutes
7. Add Finishing hops ____:____ (time)
8. Terminate boil ____:____ (time)
9. Set for 2 minutes and remove hops.

Total Boil Time: 60 Minutes - Continue to Step #7

7. COOL WORT & TRANSFER: Cool the wort down to approximately 70°F by placing the brew pot in a sink filled with ice water. Pour or siphon wort into a sanitized fermenter. Avoid transferring the heavy sediment (trub) from the brew pot to the fermenter.

8. ADD WATER: Add enough clean water (approx. 64° - 72°F) to the fermenter to bring your wort to approximately 5 gallons. Thoroughly stir the water into the wort. Be careful not to add a volume of water that will cause the wort to fall outside of the OG range specified in the BREW STATS. Once you are satisfied your wort is at the proper volume and within the OG range, record the OG in the ABV% CALCULATOR (bottom right on page 1).

ABV% Calculator

(OG - FG) x 131.25 = ABV% 

OG from Step #8

**FG from Step #10
9. **PITCH YEAST:** If using liquid yeast open package and pour over the top of the wort surface. If using a dry yeast sprinkle the contents of the yeast sachet over top of the entire wort. Firmly secure the lid onto the fermenter. Fill your airlock halfway with water and gently twist the airlock into the grommetted lid. Move fermenter to a dark, warm, temperature stable area (approx. 64º - 72ºF).

**FERMENTATION**

10. **MONITOR & RECORD:** The wort will begin to ferment within 24 hours and you will notice CO2 releasing (bubbling) out of the airlock. Within 4 - 6 days the bubbling will slow down until you see no more CO2 being released. When fermentation is complete (no bubbles for 48 hours) take a FG reading with a sanitized hydrometer and record it in your ABV% CALCULATOR.

**BOTTLING DAY (DATE __ /__ /__)**

11. **READ:** Read all of the recommended procedures before you begin.

12. **SANITIZE:** Thoroughly clean and sanitize ALL brewing equipment and utensils that will come in contact with any ingredients, wort or beer.

13. **PREPARE PRIMING SUGAR:** In a small saucepan dissolve priming sugar into 2 cups of boiling water for 5 minutes. Pour this mixture into a clean bottling bucket. Carefully siphon beer from the fermenter to a bottling bucket. Avoid transferring any sediment. Stir gently for about a minute.

14. **BOTTLE:** Using your siphon setup and bottling wand, fill the bottles to within approximately one inch of the top of the bottle. Use a bottle capper to apply sanitized crown caps.

15. **BOTTLE CONDITION:** Move the bottles to a dark, temperature-stable area (approx. 64º - 72ºF) for 2 weeks.

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**BIAB Instructions**

Mash 11.75 lbs Brewers Malt with the specialty malts in 30 quarts of water to get a single infusion mash temperature of 154º F for 60 minutes. Remove grains and drain. Bring to boil and follow the BREW DAY SCHEDULE.

**All Grain Instructions**

Mash 9.5 lbs Brewers Malt with the specialty malts in 13.5 quarts of water to get a single infusion mash temperature of 154º F for 60 minutes. Sparge with hot water of 170ºF to get 6 gallons of wort. Bring to boil and follow the BREW DAY SCHEDULE.

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**Optional Two-Stage (Secondary) Fermentation**

All you need is a 5 Gal carboy, drilled stopper, airlock and siphon setup to transfer the beer. You will also need to monitor and record the SG with your hydrometer when the beer is in the ‘primary’. When the fermentation slows (5-7 days), but before it completes, simply transfer the beer into the carboy and allow fermentation to finish in the ‘secondary’. If kit contains dry hops they should be added to the provided grain bag and left for 3-6 days.

(SECONDARY RACK DATE __ /__/___)

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**BREW TIPS**

1. The grains should not be compacted inside the bag. Grains should steep loosely allowing the hot water to soak into all of the grain evenly.

2. Run LME under hot water to allow the extract to pour easier.

3. Pay careful attention that the extract does not accumulate and caramelize on the bottom of your brew pot.

4. When consumed, hops can cause malignant hyperthermia in dogs, sometimes with fatal results.

5. To avoid bacteria growth cool as rapidly as possible. Do not add ice directly to the wort. Alternatively, you can use a brewing accessory like a Wort Chiller.

6. Use a sanitized hydrometer while adding water to monitor the SG.

7. Consider transferring your beer to a secondary carboy see “Two-Stage (Secondary) Fermentation” see sidebar.

8. Make sure bottles are thoroughly clean. Use a bottle brush if necessary to remove stubborn deposits. Bottles should be sanitized prior to filling.

9. The yeast included with this kit is a lager yeast and ferments best between 45º and 50º. If you cannot ferment at this temperature please ask a High Gravity sales person for a suitable substitute.