

## **Helles Lager**

### **Brews 5 Gallons**

Kit Inventory:					
<b>Extract:</b> □ 6 pounds Pilsen LME - or - 5 po	unds Pilsen Light DME		Steeping (Specialty) Grains:  8 ounces Munich Type 1 (Munich Light) 4 ounces Biscuit Malt 4 ounces Melanoidin Malt		
Note: LME (Liquid Malt Ex	Extract)	□ 4 ounces Bisc			
Hops:	7, 4, 6	Clarifier / Wa	Clarifier / Water Adjustment:		
□ 1.5 ounces Hersbrucker	— 60 minute boil	□ 1 Whirlfloc Ta	ablet - Add last 15 minutes of boi	1	
Priming Sugar (At Bottling	Time):				
□ 5.5 ounces Dextrose (corn sugar	) – Bring to boil with 1 cup of wate	r and add to the bottling	g bucket.		
Recommended Yeast (Selec	et One):				
□ Wyeast 2124 Bohemian Lager		ic Yeast L17 Harvest	□ Omega Yeast OYL-114 Bayer	•	
<ul> <li>□ Fermentis Saflager s-189 or W-3</li> <li>□ Get creative with different yeas</li> </ul>		nond Lager	□ Mangrove Jacks M76 Bavaria	an Lager	
<b>Brewing Notes:</b> This recipe is	ching multiple packs of yeast is reconception calculated at a 3 gallon boil size. If yettle) or add only 2 pounds of extrace	ou are seeking more hop			
	Approximate (LME / DME)	Actual			
Original Gravity (OG):	1.045 / 1.045				
Final Gravity (FG):	1.007 / 1.007				
Alcohol Percentage (ABV):	5% / 5%		ABV% = (OG-FG) x 131		
Color (SRM):	3.5 / 3				
Bitterness (IBUs):	18 / 18				
Fermentation Temperature:	50 - 55°F				
Comments:					

# Basic Fast Lager Brewing Instructions Extract with Grains

#### Inspect the kit.

- o Place the yeast into a refrigerator upon receiving.
- o Grains are packaged together, already crushed and in a muslin bag.
- o Boiling hops are packaged together in a nitrogen flushed Mylar bag. They are separated by addition times and already in muslin bags. An identifying label will be on the knot in each muslin bag. Remove this label prior to adding to the kettle.
- o If your kit includes liquid extracts and/or honey, they may be mixed in the same packing container.

#### Prepare yeast (if using Wyeast Liquid yeast).

O A few days prior, review the manufactures date on the package. It is recommended for the yeast sit at room temperature for 1 day per each month past the manufacture date. At a minimum, the yeast should sit at room temperature for 3 hours. "Smack" the pack as instructed on the package and shake to mix just prior to sitting it at room temperature.

#### **Brew Day!!**

#### Check out the American Homebrewers Association's tutorials for a video example.

https://www.homebrewersassociation.org/category/tutorials/

#### Steep the grains.

- o Add 2.5 gallons of dechlorinated water to your brew kettle. The kettle should be at least 5 gallons (20 quarts).
- o Add the steeping grain bag to the water. If your recipe includes any water adjustments such as Burton water salts or gypsum, add them at this time.
- o Increase temperature of the water to 170°F over 20-30 minutes. Remove the steeping grains when 170°F is achieved. Be careful to not exceed 170°F since it can create off-flavors in your beer. Do not squeeze the grain bag when removing.

#### Add the malt extract.

- o Remove the kettle from the burner to prevent scorching and stir in the malt extract. Make sure that the malt extract is fully dissolved
- o Place the kettle back onto the burner and bring the wort to a rolling boil.

#### Start the 60-minute boil schedule.

- o Follow the hop schedule listed on the recipe sheet.
- o Add any adjuncts and/or clarifiers as listed on the recipe sheet. Generally, clarifiers such as Irish moss or whirlfloc tablets will be added the last 10-15 minutes of the boil.
- At the end of the 60-minute boil schedule, turn off the burner.

#### Cool the wort.

- o Cool the wort as fast as possible. This can be done by placing the kettle into an ice bath or with a wort chiller.
- o Put 2.5 gallons of dechlorinated water into your sanitized fermenter.
- o Add the cooled wort to the fermenter leaving behind any hops. Also, try to leave any of the trub (sediment) behind in the kettle as well. This helps with a cleaner ferment.
- o Top off the fermenter with cool, dechlorinated water until a total of 5 gallons is achieved.
- o Aerate the wort by rocking the fermenter back and forth for 2 minutes.

#### Add the yeast

- Sanitize the yeast packet and scissors to open the yeast.
- Add the yeast to the fermenter when the temperature is at  $50-55^{\circ}$  F.
- o Put the sanitized lid or drilled stopper and water filled airlock on your fermenter. The airlock should be filled to the marked fill line.
- o When ferment is 50% complete (around 5 days, use your hydrometer SG 1.029), raise temperature 5°F every 12 hours until 65-68°F.
- o When final gravity is stable, reduce temperature 5-8°F every 12 hours until 30-32°F. Let the beer rest 3-5 days to clear.

#### **Bottling**

- o Clean and sanitize your bottles. If using 12 ounce bottles, you will need around 50 bottles. If using 22 ounce bottles, you will need around 28 bottles.
- Mix the priming sugar with 1 cup of water and bring this mixture to a boil. Add this to a sanitized bottling bucket.
- o Rack (siphon) your beer into the bottling bucket. Carefully stir the beer and sugar mixture together without splashing. Remember to sanitize your siphon and spoon prior to using.
- o Fill the bottles and cap with sanitized bottle caps. Enjoy in 2-3 weeks!