

German Lager

Clean crisp German style lager.

KIT CONTENTS

Specialty Grains

- 8oz Munich Malt

Malt Extracts

- 3lbs Pilsner Malt Extract
- 3lbs Munich Malt Extract

Hops

- 1oz **Bittering** Hops (Tettnang | Hallertau)
- 1oz **Aroma** Hops (Saaz | Spalt)

Brew Kit Extras

- 1 Muslin Bag
- 1 tsp. Irish Moss (Clarifier)
- 5oz Priming Sugar (Save for bottling day)

Recommended Yeast

- **Dry Yeast** 34/70 | **Liquid Yeast** WLP830

CONFIRM KIT CONTENTS BEFORE CONTENTS BEFORE CONTINUING

BREW DAY PROCESS

1. Secure specialty grains in muslin bag. Ensure grains are loose to allow for complete saturation.
2. Bring 3 gallons of water to 150° turn off heat and steep grain bag for 20mins.
3. Remove steeping grains, allow 1-2 mins for grain to drip dry. Turn heat back on and raise to 190°.
4. Turn off heat and slowly dissolve all malt extract into the hot water. Once all sugars are have been dissolved, return to heat and establish a boil.
 - a) Do not put cover back on the pan.
 - b) Watch the pot closely to avoid boil overs.
5. The unfermented beer is now wort.
This recipe is based on a **45 minute** boil. When your boil starts add hops at times indicated.

HOP ADDITION SCHEDULE

- Add **Bittering** hops and boil for 45 minutes.
- Add **Irish moss** and **Aroma** hops 15 mins before end of boil.
- Turn off heat after the 45 minute boil. Begin Cooling.

Estimated Original Gravity	1.055
Estimated Final Gravity	1.010
ABV	5%
Fermentation Time	1 Month
Bottle Conditioning Time	2 Weeks
Batch Size	5 Gallons
Difficulty	★★★★★

BREW DAY EQUIPMENT

- | | |
|---|--|
| <ul style="list-style-type: none"> • 4 Gallon Brew Pot • 6 Gallon Bucket/Carboy • Airlock and Stopper • Timer | <ul style="list-style-type: none"> • Long Spoon • Thermometer • Cleaner/Sanitizer • Hydrometer • Funnel |
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COOLING AND FERMENTATION

NOTE: From this point temperature and sanitation are very important. When in doubt, sanitize.

Protip: If you are using bottled water keep a few bottles in the fridge use this cold water to aid in chilling later.

1. Force cool the wort to 90° using either an ice bath or wort chiller.
2. Add 2 gallons of cold water to the sanitized fermenter, pour in chilled wort and top off with water until you reach the 5 gallon mark.

NOTE: You can now check the gravity using a sanitized hydrometer.

3. When wort temperature falls to 55°-60°, add yeast.
4. Once Yeast has been added, Place lid or stopper on the fermenter. Partially fill airlock with water.

NOTE: A glass carboy is recommended for the long term aging of this beer.

5. Place fermenter in a cool and dark location. Fermentation activity should start in 24-48 hours.
6. After 3 weeks, fermentation activity will have slowed. At this time you want to raise the temp 2°-3° a day until a temperature of 68° is reached.
7. Hold at 68° for 3 days. This is a diacetyl rest.
8. Once the diacetyl rest is complete drop the temperature to 40° and age another 2 weeks.
9. Bottled after this point.

GRAVITY READINGS

$$ABV = (OG - FG) * 131.25$$

OG: _____ Date: _____

FG: _____ Date: _____

**Ale yeast can be used to make a non-lager version.

This would take 2-3 weeks to ferment.