

Batch Size: 5 Gallons

# Black 47

## Irish Red Ale



### General Info:

Target OG: 1.051  
Target FG: 1.012  
Target ABV: 5.2%%  
IBUs: 22.8  
SRM: 15.7

Mash Temp: 152°  
Mash Time: 60 min  
Boil Time: 60 min  
Primary Ferm Temp: 65-68°

### KIT INVENTORY:

#### GRAIN

- 9 lb Pale Maris Otter Malt
- 8 oz Caramel 40L
- 4 oz Caramel 120L
- 4 oz Roasted Barley
- 4 oz Special Roast

#### Hop Additions:

- 1.25oz East Kent Golding (60min)
- ½ Whirlflock Tab (10 min)

#### Recommended Yeast

- Inland Island 301 Dublin Ale

#### NOT INCLUDED

#### BUT REQUIRED:

- Priming sugar
- Sanitizer
- Hops bag

### *Brew Day:*

Remove yeast from the refrigerator to give it time to reach room temperature.

#### 1. Mash

- Heat 1.25-2 quarts of water, per pound of grain, to around 11-12°F above your target mash temperature and pour into your mash tun. This is known as your strike water.
- Slowly pour in the grist. Stir well.
- The mash temp should now be close to the target temp. If it's not apply hot or cold water until the it is reached.
- Set a timer to mash for 60 minutes (unless otherwise instructed) at the specified temperature, or until desired conversion is reached.
- Prepare your sparge water in a separate pot by heating about 5 gallons of water to 170°F.

#### 2. Lautering

- Slightly open the valve on your mash tun and pour a small amount (1-2 Liters) into a pitcher, then gently pour it back over the mash. This is known as vorlaufng, and it helps with clarifying your wort. Do this as many times as necessary to achieve desired clarity.
- Open your valve to let a small stream of wort escape your mash tun into your boil kettle. Using a spray nozzle or other dispersing manifold, pour your hot sparge water over the grains. Keep the flow rate slow, and find a good balance so that you only have an inch or so of water above the grain bed. Do this until you reach your target boil gravity or volume.

#### 3. Boil

- Heat the wort to a boil and start the timer at 60min (unless specified otherwise), and add your first hop addition according to the schedule. **Be careful during this step, as boil-overs are extremely common!** Use the timer to complete the remainder of the hop schedule additions.
- If you are using an immersion wort chiller, sterilize it by placing it in the boiling wort with 10 minutes remaining on the timer. Whirlfloc gets dropped right into the boil.

#### 4. Fermentation

- **IMPORTANT! Sanitize everything EACH time that it will be used from this point forward.**
- Quickly cool the wort to room temp or approx 75°F. A wort chiller is ideal but an ice bath works too.
- Pour your cooled wort into the primary fermentor.

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### TIPS:

How to Calculate % of Alcohol:  
Each SG reading on the hydrometer corresponds to a % alcohol value. When taking an SG reading simply read the corresponding % value on the % scale. Subtract the FG corresponding % from the OG corresponding %. The result is the approximate percentage of alcohol by volume in your beer.  
For example:

- If the OG = 1.09 (or 12.35%) and the FG = 1.01 (or 0.1%)
- $12.35 - 0.1 = 12.25$  % alc./vol.

### TERMS:

Grist milled grain  
Rack transfer wort  
SG specific gravity  
OG original gravity  
FG final gravity  
Mash grist and water  
Wort the liquid extracted during the mash process

- If required add cold water until the volume reaches 5 gal.
- Seal the fermenter and aerate the wort by rocking the fermenting vessel back and forth a bit. Or use an aeration system or diffusion stone.
- Measure Specific Gravity of the wort with your hydrometer and record.
- To pitch the yeast, follow instructions on the package. If using liquid yeast, give the package a steady shake to suspend any settled yeast fully into the mixture.
- Soak the yeast packaging, hands and scissors in sanitizer for a couple minutes before pitching. Immediately pour your yeast into the fermenter.
- Give the stopper or lid and airlock a quick sanitizer bath, and return to the carboy or fermenting bucket to fully seal the fermenter.
- Keep your fermenting beer in a dark, cool environment between 65 and 70°F. Sunlight can cause “skunky” flavors in your finished beer.

### Primary Fermentation 2-3 Weeks

Primary fermentation will end in the 1st week, but allow the beer to stay in the primary fermenter for 2 weeks. The yeast will clean up some of the off flavors on days 7-14.

### Secondary Fermentation/Dry Hop (if required)

Sanitize the siphoning equipment and the secondary fermenter. Place the primary fermenter on a counter and the secondary on the floor. Place the dry hops and other additions, if included, in the bottom of the secondary. Siphon the beer into the secondary fermenter ensuring no splashing. At this point, oxygen is a threat to the beer. Replace the sanitized airlock and lid/bung and place the fermenter back in a dark area.

## 5. Bottling

- **IMPORTANT! Sanitize anything that will be used during this stage.**
- **IMPORTANT! Be sure NOT to introduce oxygen by splashing or agitating the beer.**

For about 2.5 Volumes of CO<sub>2</sub>, use 4.5 oz of corn sugar.

Sanitize bottles, caps, and all bottling equipment. Mix the corn sugar with 2 cups of water and bring to a boil for 10 minutes. Allow to cool in a water bath with the lid on the pot. Pour the mixture into the bottom of the bottling bucket. Transfer the beer into the bucket using the same siphon procedure as above. Take a sample for the Final Gravity measurement in the hydrometer. This sample should be before the beer mixes with the corn sugar. We recommend taking the sample from what is left in the fermenter. Fill with a bottle filler and cap the bottles paying attention to sanitation. Store the bottles at room temperature in a dark place for 2 weeks.