



## Milk Stout

*Bold and black, yet sweet and subtle. This recipe offers all of the chocolate and roasted notes that you would expect from a stout. Addition of Lactose produces a full body, thick, creamy head, and sweet finish.*

IBUs: 20 - 24

OG: 1.057 - 1.061

FG: 1.020 - 1.024

ABV: 5.0% - 5.5%

Difficulty: Easy

Color: Black

### Contents

- Ingredients
- Grain Bag(s)
- Hops may vary due to availability.
- Priming Sugar
- Bottle Caps
- Brewing Procedures

### Glossary

- OG**  
Original Gravity
- SG**  
Specific Gravity
- FG**  
Final Gravity
- CO2**  
Carbon Dioxide
- DME**  
Dried Malt Extract
- LME**  
Liquid Malt Extract
- IBU**  
International Bittering Units (*Tinseth*)
- ABV**  
Alcohol by Volume

### Ingredients

#### FERMENTABLES

- 3.3 lb. Dark LME
- 3.3 lb. Extra Light LME
- .5 lb. Lactose
- .5 lb. Maltodextrin

#### SPECIALTY GRAINS

- 6 oz. Cara Brown Supreme
- 4 oz. Chocolate Barley
- 4 oz. Black Barley
- 8 oz. Chocolate Wheat

#### HOPS

- 1 oz. Cluster
- 1 oz. UK Fuggle

#### YEAST

- 1 Sachet

## Recommended Procedures

### BREW DAY (DATE \_\_\_ / \_\_\_ / \_\_\_)

#### 1. READ

Read all of the recommended procedures before you begin.

#### 2. SANITIZE

Thoroughly clean and sanitize ALL brewing equipment and utensils that will come in contact with any ingredients, wort or beer with a certified sanitizer, e.g., Star San or IO Star.

#### 3. STEEP GRAINS

Pour 2.5 gallons of clean water into your brew pot and begin to heat<sup>1</sup>. Pour crushed grains into grain bag and tie a loose knot at the top of the bag<sup>2</sup>. When the water is within an appropriate steeping temperature (150° - 165°F) place the grain bag into the brew pot<sup>3</sup>. Steep grains for approximately 20 minutes. Remove grain bag and without squeezing, allow liquid to drain back into brew pot. Your water is now wort.

#### 4. START BOIL

Bring your wort to a gentle, rolling boil. Add **all of the included LME, Lactose, and Maltodextrin** to the boiling wort<sup>4</sup>. Continuously stir the extract into the wort as it returns to a gentle, rolling boil<sup>5</sup>.

#### 5. FOLLOW SCHEDULE<sup>6</sup>

As directed on the BREW DAY SCHEDULE (right), slowly sprinkle the hops into the boiling wort. Be careful not to let the wort boil over the pot. Using the provided BREW DAY SCHEDULE, note the time the hops were added to help keep your brew on schedule. Continue the gentle, rolling boil until the boil is complete.

### Recommended Brew Day Equipment

- 4 Gallon Brew Pot (or larger)
- 6.5 Gallon Fermenter
- Airlock
- Long Spoon or Paddle
- Hydrometer
- Thermometer
- No-Rinse Sanitizer
- Cleanser

### Brew Tips

<sup>1</sup>We suggest doing a 2.5 gallon boil at minimum. If you have the equipment to boil more than 2.5 gallons feel free to do so. There is no need to change the amount of any of the ingredients.

<sup>2</sup>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.

<sup>3</sup>Pay careful attention not to let your steeping water exceed 170°F which leeches tannins into the wort.

<sup>4</sup>Run canisters of LME under hot water to allow the extract to pour easier.

<sup>5</sup>Pay careful attention that the extract does not accumulate and caramelize on the bottom of your brew pot.

<sup>6</sup>When consumed, hops can cause malignant hyperthermia in dogs, sometimes with fatal results. Even small amounts, including "spent" hops from brewing, can trigger a deadly reaction.

### BREW DAY SCHEDULE

1. Add 1 oz. Cluster hops \_\_\_\_\_ : \_\_\_\_ (time)
2. Boil 30 minutes
3. Add 1 oz. UK Fuggle hops \_\_\_\_\_ : \_\_\_\_ (time)
4. Boil final 30 minutes
5. Terminate boil \_\_\_\_\_ : \_\_\_\_ (time)

**Total Boil Time: 60 Minutes**

**Continue to Step #6**



## Recommended Procedures (continued)

### 6. COOL WORT & TRANSFER

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

### 7. ADD WATER

Add enough clean water (approx. 64° - 72°F) to the fermenter to bring your wort to approximately 5 gallons<sup>8</sup>. Thoroughly stir the water into the wort. Using a sanitized hydrometer take an Original Gravity (OG) reading. Once you are satisfied your wort is at the proper volume and within the OG range, record the OG in the ABV% CALCULATOR (right).

### 8. PITCH YEAST

Sprinkle the contents of the yeast sachet over top of the entire wort surface (DO NOT REHYDRATE) and stir well with sanitized spoon or paddle. Firmly secure the lid onto the fermenter. Fill your airlock halfway with water and gently twist the airlock into the grommeted lid. Move fermenter to a dark, warm, **temperature-stable** area (approx. 64° - 72°F).

## FERMENTATION

### 9. MONITOR & RECORD

The wort will begin to ferment within 24 - 48 hours and you may notice CO2 releasing (bubbling) out of the airlock<sup>9</sup>. If no bubbling is evident on day two of fermentation, take a gravity reading with a sanitized hydrometer. If gravity has dropped below your OG reading then fermentation is taking place. Take a gravity reading again in 4 - 6 days<sup>10</sup> and confirm fermentation has completed by comparing the gravity reading to the FG range listed at the top of the instructions. If gravity is not in the FG range, continue fermentation until it reaches the FG range. Record your FG reading in the ABV% CALCULATOR (right).

## BOTTLING DAY (DATE \_\_\_ / \_\_\_ / \_\_\_)

### 10. READ

Read all of the recommended procedures before you begin.

### 11. SANITIZE

Thoroughly clean and sanitize ALL brewing equipment, utensils, and bottles that will come in contact with any ingredients, wort or beer with a certified sanitizer, e.g., Star San or IO Star.

### 12. PREPARE PRIMING SUGAR

In a small saucepan dissolve 3.5 oz. of 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. **1 oz. of priming sugar is equal to approx. 2.5 tablespoons**

### 13. BOTTLE

Using your siphon setup and bottling wand, fill the bottles<sup>11</sup> to within approximately one inch of the top of the bottle. Use a bottle capper to apply sanitized crown caps.

### 14. BOTTLE CONDITION

Move the bottles to a dark, warm, **temperature-stable** area (approx. 64° - 72°F). Over the next two weeks the bottles will naturally carbonate. Carbonation times vary depending on the temperature and beer style, so be patient if it takes a week or so longer.

**CHILL & ENJOY YOUR TASTY BREW AND THANK YOU FOR CHOOSING BREWER'S BEST® PRODUCTS.**

## Brew Tips

<sup>7</sup>To avoid bacteria growth do this as rapidly as possible. Do not add ice directly to the wort. Alternatively, you can use a brewing accessory like a Wort Chiller.

<sup>8</sup>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.

<sup>9</sup>Within 4 - 6 days the bubbling will slow down until you see no more CO2 being released.

<sup>10</sup>Consider transferring your beer to a secondary carboy, see "Two-Stage (Secondary) Fermentation" sidebar below.

<sup>11</sup>Use standard crown bottles, preferably amber color. Make sure bottles are thoroughly clean. Use a bottle brush if necessary to remove stubborn deposits. Bottles should be sanitized prior to filling.

## Two-Stage (Secondary) Fermentation

Brewer's Best® recommends home brewers employ the practice of a two-stage fermentation. This will allow your finished beer to have more clarity and an overall better, purer flavor. All you need is a 5-gallon 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'. Leave the beer for about two weeks and then proceed to Bottling Day. Consult your local retailer to learn more about this technique.

(SECONDARY RACK DATE \_\_\_ / \_\_\_ / \_\_\_)

## Recommended Bottling Day Equipment

- 6.5 Gallon Bottling Bucket
- Siphon Setup
- Bottle Filling Wand
- 12 oz. Bottles (approx. 53)
- Crown Caps
- Bottle Brush
- Capper
- Sanitizer

## ABV% Calculator

(OG - FG) x 131.25 = ABV%

(\_\_\_\_ \* - \_\_\_\_ \*\*) x 131.25 = \_\_\_\_ %

\*OG from Step #7

\*\*FG from Step #9



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