



Murky Waters

AMERICAN BROWN ALE

Original Gravity: 1.053 Final Gravity: 1.014 ABV: 5.2%
Bitterness: 19 IBUs SRM: 24 (medium amber)

A strongly flavored, hoppy brown beer style originated by American home brewers. Related to American Pale and American Amber Ales, but with more of a caramel and chocolate character, which tends to balance the hop bitterness and finish.

Grains, Extracts & Sugars

Specialty Grains

.5# Crystal 80
.5# Chocolate
.25# Special Roast

steep specialty grains 20-30 mins @ 155°

Extract Brewing

6# Briess Pilsen DME Boil 60 mins

All Grain Brewing

8# Rahr 2-Row

*medium body: mash at 152° for 60-75 min
water: add 1 teaspoons Gypsum*

Hops

1 oz	East Kent Golding	Boil 60 min
.5 oz	Willamette	Boil 30 min
.25 oz	Willamette	Boil 15 min

Misc

5 oz	Priming Sugar	Bottling
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Yeast

Dry:
Safale US-05 dry yeast

Liquid:
Whitelabs WLP051 California V Ale

Murky Waters Brown Ale ~ 5 Gal Brewing Instructions

1. Sanitize your fermenter and other equipment that will be in contact with your beer.

.5# Crystal 80, .5# Chocolate, .25# Special Roast

2. Place crushed grains in muslin bag. Steep grains in 2.5 gallons of water in your brew pot at 155 degrees for 25-30 minutes. Remove grains and let them drain. Do not squeeze.

6# Pilsen DME @ 60 min

3. Bring pot to a rolling boil. Lower heat. Add malt extract. Stir until everything has dissolved. Return to boil.

**1 oz East Kent Golding @ 60 mins, .50 oz Willamette @ 30 mins,
.25 oz Willamette @ 15 mins**

4. Boil the above ingredients for a total of one hour. Add hops, malts and sugars to the boil according to schedule.
5. After 60 minutes boiling time, turn off heat. Put cover on your brew pot. Immerse in an ice bath or use a wort chiller to cool to 100 degrees.
6. Fill your sanitized fermenter with 2.5 gallons of cold water.
7. Pour your wort into your fermenter. Top it off to 5 gallons with water, if needed. Take OG hydrometer reading.

WLP051 California V Ale or Safale us-05 dry yeast

8. Pitch yeast. Fermentation should start within 48 hours and last 3 to 10 days. Ferment for 1 week in primary fermenting vessel before proceeding to next step.
9. To be sure fermentation is finished take a hydrometer reading 2 days in a row. It should be close to the final gravity.
10. Sanitize your siphon equipment and secondary fermenter.
11. Siphon from fermenter to secondary. Avoid taking up yeast off the bottom. Leave in secondary to condition 7-10 days. If your recipe calls for dry hops or other ingredients add them now.

5 oz priming sugar

12. Boil priming sugar in 2 cups of water for 5 minutes, cool to room temp and then pour into bottling bucket.
13. Siphon beer into bottling bucket and stir well to combine.
14. Fill bottles leaving ½ to 1" airspace. Store in a cool place for 2 weeks to condition. Then drink!