

### **BEER SPECS**

#### **Original Gravity:**

1.052—1.054 @ 65% efficiency 1.056—1.058 @ 70% efficiency 1.060—1.062 @ 75% efficiency Final Gravity: 1.016—1.019 IBU: 16-18 ABV%: 4.3% - 6.0% Yield: 5 Gallons

# NOT INCLUDED IN KIT

Irish Moss (for clarity, optional)

Yeast

Bottle Caps (53 caps needed)

Priming Sugar (5oz or 3/4 cup)

#### **MASH & FERMENTATION**

#### Suggested Mash Temperature:

A high mash temperature is recommended to create a rich, malty beer with lots of body. We suggest a mash temperature of 154° - 156°F.

#### Fermentation Schedule:

We recommend a primary fermentation of two to three weeks at 55° -65°F with an authentic Scottish ale yeast. While this temperature range is preferred, this ale can be fermented warmer, in the standard 64° to 72°F range. A secondary fermentation can be used to improve clarity and reduce sedimentation, if desired.

# The Daddy Mac Scottish Ale - Pure malty goodness!

Our brewer Wes's Award-Winning Scottish Ale! The Daddy Mac Scottish Ale is a Scottish Export 80/- style ale that embodies all the best qualities of the malty beer treat from the Scottish highlands! A combination of specialty malts and low hopping rates bring out the caramel malt character in this beer.

# **RECIPE DETAILS**

10 lbs.Maris Otter Malt1 lb.Amber Malt0.5 lb.Chocolate Malt0.5 lb.Crystal 60L Malt

# **FERMENTABLES**

| 90 Minute Boil |   |
|----------------|---|
| 1.0 oz.        | East Kent Golding hops, added 60 min from the end of the boil |
| 1.0 tsp.       | Irish moss (optional), added 20 min from the end of the boil  |
|                | BOIL SCHEDULE   |

YEAST SUGGESTIONS: Wyeast #1728 Scottish Ale, White Labs WLP028 Edinburgh Scottish Ale, or Nottingham Dry Yeast.

While not quite a high-gravity beer, two yeast packs or a starter are recommended for this beer when fermenting at cooler temperatures.

**Brewer's Notes:** This beer is an absolute delight when made with traditional Scottish brewing techniques! While standard brewing techniques will still yield a fine beer, a more authentic Scottish ale can be made by following a few extra steps. First, do a little kettle caramelization. This can be done by pulling off the first gallon or so of runnings off the mash and reducing it down by as much as 50%. This recipe also calls for a 90 minute boil to further encourage this caramelization. When chilling, try to chill this beer to lower than average ale temperatures and, if you have the ability, ferment this beer "low and slow" to simulate the traditional Scottish fermentation temperatures. This will help to keep the beer clean. A fermentation temperature of 55 to 60 is recommended when using a traditional Scottish ale yeast. If fermenting at this low a temperature, more yeast is suggested due to slower fermentation and reduced yeast reproduction.

Note that these extra steps aren't required, but do help to create a more authentic Scottish ale. Because of the extra boil time and kettle caramelization, plan accordingly for extra evaporation losses.



