



Belgian Malts that Make Your Beer So Special

Bitter Beer



Beer recipe

RECIPE FOR 100L

MALT

Château Pilsen 2RS	60% / 10.1 kg
Château Melano	25% / 4.2 kg
Château Cara Gold®	5% / 0.8 kg
Château Munich	10% / 1.7 kg

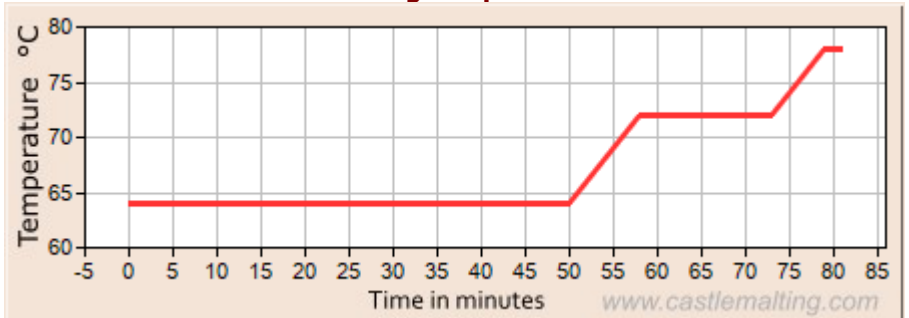
HOPS

Magnum (12.0% aa)	31.5 IBU / 100 g
Cascade (6.0% aa)	3.5 IBU / 100 g

YEAST

SafAle S-04	65 g
-------------	------

Mashing temperature



ABV 4.5%

Color 34
EBC

Bitterness
35 IBU

Description

This full-bodied, smooth beer has a flavor that lingers pleasantly on the palate. It is bitter, without being overwhelmingly so due to a perfect balance of malt and subtle hops. A refreshing and very satisfying beer.

Service:

Glass: American Pint
Temperature: 4-8°C

BREWER'S TIP

For a dryer finish, you can use higher pitching rates (0.65-0.8 g/L)

Step 1: Mashing

Mash-in and follow the profile below:

pH	5.3	Mix Ratio	3.0 L/kg
----	-----	-----------	----------

Mash-in at 64°C

Rest for 50min at 64°C

Rise to 72°C at 1°C/min. Rest for 15min at 72°C and do the **Iodine Test**

Rise to 78°C at 1°C/min. Rest for 2min at 78°C to **mash out**

Once the mash is done, filter and sparge with water at 78°C

Step 2: Boiling

Boil for 60min. Hop addition 1: After 10min add Magnum. Hop Addition 2: After 50min add Cascade. Whirlpool to remove the trub

Total evap	6.0%	Batch size	100L	OG	11.0°P	Efficiency	85%
------------	------	------------	------	----	--------	------------	-----

Step 3: Fermentation and Maturation Cool down the wort to 18°C and pitch the yeast. Ferment at 18°C for 2 days then rise to 20°C. Once the fermentation is done (FG reached and off-flavors removed – about 7 days), drop the temperature to 8°C and rest for 1 day, and then harvest the yeast. Drop the temperature to 2°C and rest for 7 days.

Attenuation	76%	FG	2.60°P
-------------	-----	----	--------

Step 4: Cold Aging and Packaging

Cold age the beer at -1°C for 5 days, remove the residual yeast, and carbonate until **2.5 volumes of CO2**. The beer is ready to package and drink. Enjoy!

*For refermentation in the bottle, add brewing sugar and SafAle F-2.

This recipe is provided by Castle Malting®. Please note that this recipe is just a guideline. Some modification might need to be done to meet different technologies, efficiencies and ingredients yield as grain dry extract and hop alpha acid percentage.

For further information & service please contact:
info@castlemalting.com

Brewing is an experiment! Brew your own beer!
Send us your recipe, and we'll be pleased to publish it on our website