



# Belgian Malts that Make Your Beer So Special

## Hoppy Ale



## Beer recipe

### RECIPE FOR 100L

#### MALT

Château Pilsen 2RS	70% / 12.7 kg
Château Munich	20% / 3.6 kg
Château Crystal®	10% / 1.8 kg

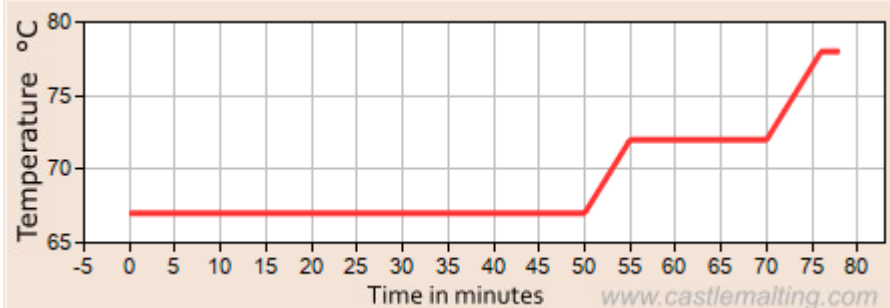
#### HOPS

Cascade (6.0% AA)	180 g
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#### YEAST

SafAle US-05	180 g
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### Mashing temperature



ABV 4.8%

Color 25  
EBC

Bitterness\*  
20 IBU

### Description

Now, using the same base recipe (Gruit Ale), let's see the importance of hops in brewing today. The hop chosen to be added (Cascade) brings the bitterness and citrus notes to the beer, reminiscent of a pale ale. Although this hop variety does not originate from the time and region of early use of hops in beer production, it represents the modern hop culture very well.

\*The bitterness depends on the alpha acid content of hops, boiling conditions and other parameters.

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

### Step 1: Mashing

Mash-in and follow the profile below:

pH	5.3	Mix Ratio	3.0 L/kg
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Mash-in at 67°C.

Rest for 50min at 67°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 60g of Cascade.

Hop addition 2: After 45min add 60g of Cascade.

Hop addition 3: After 55min add 60g of Cascade.

Whirlpool to remove the trub

Total evap	6%	Batch size	100L	OG	10.8°P	Efficiency	80%
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### Step 3: Fermentation and Maturation

Cool down the wort to 18°C and pitch the yeast.

Ferment at 18°C for 1 day then rise to 22°C. Once the fermentation is done (FG reached and off flavours 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	80%	FG	2.14°P
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### Step 4: Cold Aging and Packaging

Cold age the beer at -1°C for 5 days, remove the residual yeast and carbonate until **5.0 g/L of CO<sub>2</sub>**. The beer is ready for packaging and drinking. Enjoy!

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

