



# Belgian Malts that Make Your Beer So Special

## Low Alcoholic Beer



## Beer recipe

### RECIPE FOR 100L

#### MALT

Château Pilsen 2RS	60.0% / 5.5 kg
Château Wheat Blanc®	12% / 1.1 kg
Oat Flakes	10.0% / 0.9 kg
Château Cara Gold®	8.0% / 0.7 kg
Château Chocolat	5.0% / 0.5 kg
Château Wheat Black	5.0% / 0.5 kg

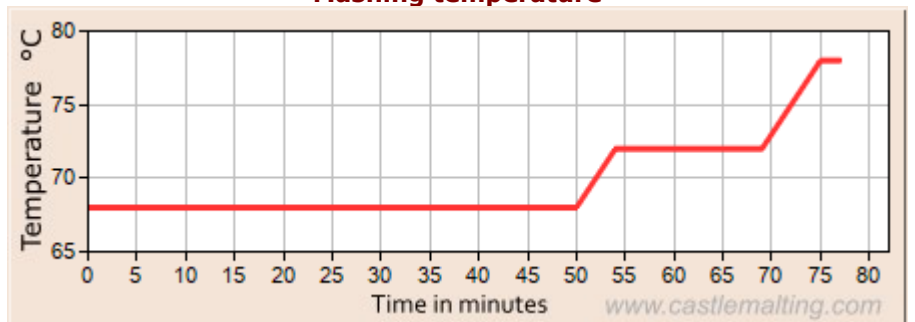
#### HOPS

Magnum (12.0% AA)	40 g
-------------------	------

#### YEAST

SafAle LA-01	80 g
--------------	------

### Mashing temperature



ABV 0.5%	Color 70 EBC	Bitterness* 15 IBU
----------	--------------	--------------------

### Description

Producing a quality non-alcoholic beer with the same attributes as an alcoholic beer is still a huge challenge. Thus, we use a special yeast capable of consuming only the simplest sugars in the wort, producing a low alcohol level and typical fermentation aromas. And on top of it, we make use of specialty malts and adjuncts to bring this beer to life.

With a dark colour and light body, this beer has a slightly malty aroma and taste with notes of caramel, chocolate and coffee. A great alternative for those looking for a non-alcoholic and refreshing sensory experience.

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

### Step 1: Mashing

Mash-in and follow the profile below:

pH	5.3	Mix Ratio	2.5 L/kg
----	-----	-----------	----------

Mash-in at 68°C.

Rest for 50min at 68°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: After 30min add Magnum.

Whirlpool to remove the trub

Total evap 6.0%	Batch size 100L	OG 6.0°P	Efficiency 90%
-----------------	-----------------	----------	----------------

### Step 3: Fermentation and Maturation

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

As the beer at the end of fermentation will contain a lot of residual fermentable sugars, it is mandatory to pasteurize the beer after packaging (between 80 and 120 PU). This yeast is not suitable for cropping and repitching.

Ferment at 18°C. Once the fermentation is done (FG reached and off flavours removed – about 5 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 15%	FG 5.10°P
-----------------	-----------

### Step 4: Cold Aging and Packaging

Cold age the beer at -1°C for 5 days, remove the residual yeast, and

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](mailto: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

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.

---

La Malterie du Château SA (Castle Malting); Malting Plant: Rue de Mons (Bel) 94, 7970 Beloeil, Belgium  
Distribution Center: Rue de l'Orbette 1, 7011 Ghlin (Mons), Belgium; Headquarters: Rue de Mons (Bel) 94, 7970 Beloeil, Belgium;  
Tel.: +32 87 662095; info@castlemalting.com; www.castlemalting.com; Registered Tournai 79754; VAT: BE0455013439  
CBC Banque SA - Avenue Albert 1er 60 - 5000 Namur Account : 193-1242112-48 IBAN : BE11 1931 2421 1248 BIC : CREGBEBB