

# Belgijski witbier

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **21**
- SRM **3.3**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **50 C**, Time **30 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (66.7%)	82 %	4
Grain	Płatki pszeniczne	1 kg (22.2%)	85 %	3
Grain	Płatki owsiane	0.5 kg (11.1%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	15 g	40 min	10 %
Boil	Mandarina Bavaria	10 g	15 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM23 Magiczny ogród	Wheat	Liquid	30 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	Skórka pomarańczowa świeża	20 g	Boil	10 min

Spice	Skórka pomarańczowa suszona	20 g	Boil	10 min
Spice	Trawa cytrynowa	20 g	Boil	10 min