

# Witbier

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **17**
- SRM **3.1**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **0 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **20.2 liter(s)**

## Steps

- Temp **45 C**, Time **20 min**
- Temp **55 C**, Time **15 min**
- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **15.5 liter(s)** of strike water to **48.8C**
- Add grains
- Keep mash **20 min** at **45C**
- Keep mash **15 min** at **55C**
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **72C**
- Sparge using **19.6 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	1.5 kg (31.9%)	82 %	4
Grain	Viking Wheat Malt	1.5 kg (31.9%)	83 %	5
Grain	Płatki pszeniczne	1 kg (21.3%)	85 %	3
Grain	Płatki owsiane	0.7 kg (14.9%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	15 g	60 min	9.4 %
Aroma (end of boil)	Centennial	10 g	10 min	9.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Brewferm Blanche	Wheat	Dry	12 g	Brewferm

## Extras

Type	Name	Amount	Use for	Time
------	------	--------	---------	------

Spice	Suszona skórka cytryny	20 g	Boil	5 min
Flavor	Kolendra	20 g	Boil	5 min
Flavor	Suszona skórka słodkiej pomarańczy	30 g	Secondary	7 day(s)

## Notes

- Kolendra cała  
10,5 BLG  
*Jul 22, 2019, 11:38 PM*