

# Witbier

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **16**
- SRM **3.2**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **10 %**
- Size with trub loss **44 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **52.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.5 liter(s)**
- Total mash volume **38 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **28.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **33.8 liter(s)** of **76C** water or to achieve **52.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (52.6%)	81 %	4
Grain	Pszenica niesłodowana	4 kg (42.1%)	75 %	3
Grain	Płatki owsiane	0.5 kg (5.3%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	48 g	60 min	4.5 %
Boil	Saaz (Czech Republic)	32 g	15 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	60 ml	Fermentum Mobile

## Extras

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

Spice	Skórka słodkiej pomarańczy	40 g	Boil	15 min
Spice	Skórka curacao	40 g	Boil	15 min
Spice	Kolendra	40 g	Boil	15 min

### Notes

- pszenicę niesłodowaną kleikować przez 30 min w temp. 64°C przed dodaniem sódów  
*May 16, 2022, 3:28 PM*