

# witbier v.2018

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **13**
- SRM **3.1**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **23.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **9.5 liter(s)**
- Total mash volume **13 liter(s)**

## Steps

- Temp **65 C**, Time **1 min**
- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **5 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **9.5 liter(s)** of strike water to **69.7C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **1 min** at **65C**
- Keep mash **5 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Heidelberg	3 kg (66.7%)	80.5 %	3
Grain	Pszeniczny	0.5 kg (11.1%)	85 %	4
Adjunct	Pszenica niesłodowana	1 kg (22.2%)	75 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	60 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M47 Belgian Abbey	Ale	Dry	10 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Spice	CURACAO	20 g	Boil	15 min

Spice	kolendra	20 g	Boil	10 min
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