

# Witbier ala Żywiec białe

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU ---
- SRM **3.5**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **38.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **67 C**, Time **25 min**
- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **63.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **70 min** at **64C**
- Keep mash **25 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **31 liter(s)** of **76C** water or to achieve **38.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	3.75 kg (49.9%)	80 %	4
Grain	Płatki pszeniczne	3.38 kg (45%)	85 %	3
Grain	Płatki owsiane	0.38 kg (5.1%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Saaz (Czech Republic)	30 g	60 min	4.5 %
Mash	Saaz (Czech Republic)	22.5 g	15 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Wheat	Dry	5 g	---

## Extras

Type	Name	Amount	Use for	Time
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Spice	kolendra	10.5 g	Boil	65 min
Spice	curacao	30 g	Boil	65 min