

# Witbier

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **19**
- SRM **3.5**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **25.5 liter(s)**
- Trub loss **1 %**
- Size with trub loss **25.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **29.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **45 C**, Time **15 min**
- Temp **54 C**, Time **15 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17.9 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **15 min** at **45C**
- Keep mash **15 min** at **54C**
- Keep mash **60 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom pszeniczny	1 kg (19.6%)	81 %	6
Grain	Strzegom Pilzneński	2 kg (39.2%)	80 %	4
Grain	Weyermann - Acidulated Malt	0.2 kg (3.9%)	80 %	6
Grain	Wheat, Flaked	0.4 kg (7.8%)	77 %	4
Grain	Oats, Flaked	0.8 kg (15.7%)	80 %	2
Grain	Barley, Flaked	0.4 kg (7.8%)	70 %	4
Grain	sahti	0.3 kg (5.9%)	77 %	10

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	10 g	50 min	7 %
Boil	Sybilla	10 g	30 min	7 %
Boil	Sybilla	10 g	15 min	7 %
Aroma (end of boil)	Sybilla	10 g	10 min	7 %

Aroma (end of boil)	Sybilla	10 g	5 min	7 %
Whirlpool	Sybilla	10 g	0 min	3.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	200 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Flavor	starte skórki cytrusów	100 g	Boil	10 min
Flavor	kolendra	5 g	Boil	10 min
Flavor	Curacao	20 g	Boil	10 min