

# witbier

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **17**
- SRM **4.4**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **170 liter(s)**
- Trub loss **5 %**
- Size with trub loss **178.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **215.9 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **173.9 liter(s)**
- Total mash volume **220.9 liter(s)**

## Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **173.9 liter(s)** of strike water to **71.1C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **89 liter(s)** of **76C** water or to achieve **215.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	20 kg (42.6%)	80 %	3.7
Grain	Pszeniczny	5 kg (10.6%)	85 %	4
Grain	Pszenica niesłodowana	20 kg (42.6%)	60 %	3
Grain	słód enzymatyczny	2 kg (4.3%)	80 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	magnum	100 g	60 min	7.8 %
Boil	Puławski	100 g	10 min	8.9 %
Boil	Puławski	100 g	5 min	8.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale BE-134	Ale	Slant	3000 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	skórka pomarańczy	250 g	Boil	5 min

Flavor	skórka mandarynki	250 g	Boil	5 min
Flavor	skórka cytryny	150 g	Boil	5 min
Spice	kolendra	30 g	Boil	5 min