

## WITBIER #3

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **20**
- SRM **3.6**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **20.2 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **24.9 liter(s)**

### Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **20.8 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **3.6 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (48.2%)	81 %	4
Grain	Płatki pszeniczne	2 kg (48.2%)	85 %	3
Grain	Weyermann - Acidulated Malt	0.15 kg (3.6%)	80 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	9.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM23 magiczny ogród	Wheat	Liquid	1000 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Spice	kolendra	15 g	Boil	5 min
Spice	skórka gorzkiej pomarańczy	20 g	Boil	5 min

Spice	zest pomarańczy z 3szt	20 g	Secondary	5 day(s)
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