

## Witek kolega z wojska

- Gravity **12.4 BLG**
- ABV ---
- IBU **16**
- SRM **3.9**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Oats, Flaked	0.5 kg (11.1%)	80 %	2
Grain	Strzegom Pilzneński	2 kg (44.4%)	80 %	4
Grain	Wheat, Flaked	1 kg (22.2%)	77 %	4
Grain	Pszeniczny	1 kg (22.2%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Boil	Cascade	10 g	15 min	6 %
Boil	Cascade	10 g	0 min	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove jack's m21 belgian wit	Ale	Dry	10 g	---

### Extras

Type	Name	Amount	Use for	Time
Spice	kolendra	15 g	Boil	10 min

Flavor	skrórka bergamotki	20 g	Boil	20 min
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