

## witek

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **22**
- SRM **4.1**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.6 liter(s)**
- Total mash volume **11.5 liter(s)**

### Steps

- Temp **45 C**, Time **25 min**
- Temp **69 C**, Time **55 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **8.6 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **25 min** at **45C**
- Keep mash **55 min** at **69C**
- Keep mash **10 min** at **76C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Wheat Malt, White	1.8 kg (62.5%)	85 %	5
Grain	Oats, Flaked	0.08 kg (2.8%)	80 %	2
Grain	Pale Malt (2 Row) UK	1 kg (34.7%)	78 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	15 g	60 min	3 %
Boil	Golding	18 g	45 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Belgian Witbier	Ale	Liquid	50 ml	Wyeast Labs

### Extras

Type	Name	Amount	Use for	Time
Spice	colendian seed	5 g	Boil	10 min

Spice	orange peel	25 g	Boil	10 min
Spice	bitter orange peel	9 g	Boil	10 min