

## #002 Belgijski witbier

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **21**
- SRM **3.3**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

### Steps

- Temp **50 C**, Time **30 min**
- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **10.2 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (58.8%)	80 %	4
Grain	Płatki orkiszowe	0.25 kg (7.4%)	80 %	6
Grain	Płatki pszeniczne	0.4 kg (11.8%)	85 %	3
Grain	Płatki owsiane	0.5 kg (14.7%)	85 %	3
Grain	Rice, Flaked	0.25 kg (7.4%)	70 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Extra Styrian Dana	7 g	60 min	13.2 %
Boil	Extra Styrian Dana	7 g	15 min	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M21 Belgian Wit	Ale	Dry	11 g	Mangrove Jack's

### Extras

Type	Name	Amount	Use for	Time
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Spice	Kolendra indyjska tłuczona	7 g	Boil	10 min
Spice	Skórka cytrynowa świeża	15 g	Boil	10 min
Spice	Skórka pomarańczowa świeża	15 g	Boil	10 min
Spice	Skórka pomarańczowa suszona KOTANIY	10 g	Boil	10 min
Spice	Trawa cytrynowa KOTANIY	7 g	Boil	10 min