

## #73 Witbier

- Gravity **10 BLG**
- ABV **4 %**
- IBU **14**
- SRM **3**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **30.4 liter(s)**
- Trub loss **4 %**
- Size with trub loss **31.6 liter(s)**
- Boil time **80 min**
- Evaporation rate **6.3 %/h**
- Boil size **35.4 liter(s)**

### Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **25.4 liter(s)**

### Steps

- Temp **53 C**, Time **20 min**
- Temp **65 C**, Time **85 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **3 min**

### Mash step by step

- Heat up **20.1 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **53C**
- Keep mash **85 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **3 min** at **77C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **35.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.5 kg (28.4%)	80 %	4
Grain	Briess - Pale Ale Malt	1 kg (18.9%)	80 %	7
Grain	Pszenica niesłodowana	2 kg (37.8%)	75 %	3
Grain	Płatki owsiane	0.59 kg (11.2%)	85 %	3
Grain	Wheat, Torrified	0.2 kg (3.8%)	79 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	47 min	9.5 %
Boil	Saaz (Czech Republic)	20 g	15 min	3.21 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's - Belgian Wit M21	Wheat	Dry	20 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Spice	Kolendra	18 g	Boil	5 min
Spice	Curacao	20 g	Boil	5 min
Spice	Skórka słodkiej pomarańczy	20 g	Boil	5 min
Spice	Skórka bergamotki	10 g	Boil	5 min