#? Witbier

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **17**
- SRM **3.3**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **5 min**
- Temp **78 C**, Time **10 min**
- Temp **68 C**, Time **10 min**

Mash step by step

- Heat up **21.6 liter(s)** of strike water to **68.4C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **10 min** at **68C**
- Keep mash **5 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg *(53.6%)*	80 %	4
Grain	Pszenica niesłodowana	2 kg *(35.7%)*	70 %	3
Grain	płatki owsiane	0.4 kg *(7.1%)*	65 %	3
Sugar	Cukier	0.2 kg *(3.6%)*	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	20 g	60 min	7 %
Aroma (end of boil)	Zula	20 g	5 min	7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's - Belgian Wit M21	Wheat	Dry	10.5 g	Mangrove Jack's

Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Spice	kolendra kamis	10 g	Boil	15 min
Spice	skórka gorzkiej pomarańczy	15 g	Boil	15 min
Spice	kolendra kamis	10 g	Boil	5 min
Spice	skórka gorzkiej pomarańczy	15 g	Boil	5 min