

# Witbier

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **12**
- SRM **3.7**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.1 liter(s)**
- Boil time **100 min**
- Evaporation rate **5 %/h**
- Boil size **28.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

## Steps

- Temp **50 C**, Time **60 min**
- Temp **68 C**, Time **90 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **60 min** at **50C**
- Keep mash **90 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **21.4 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.2 kg (38.3%)	81 %	4
Grain	Biscuit Malt	0.1 kg (1.7%)	79 %	45
Grain	Pszeniczny	0.7 kg (12.2%)	85 %	4
Adjunct	Płatki pszeniczne	2 kg (34.8%)	85 %	3
Adjunct	Płatki owsiane	0.5 kg (8.7%)	85 %	3
Sugar	cukier	0.25 kg (4.3%)	100 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	15 g	90 min	6 %
Boil	Cascade	15 g	15 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Belgian Witbier	Ale	Liquid	125 ml	Wyeast Labs

## Extras

Type	Name	Amount	Use for	Time
Other	cukier	250 g	Boil	90 min
Flavor	kminek rozgnieciony	0.5 g	Boil	15 min
Flavor	kolendra	7.5 g	Boil	10 min
Other	łyżka mąki	10 g	Boil	10 min
Flavor	skórka pomarańczy	50 g	Boil	10 min
Flavor	kolendra	7.5 g	Boil	3 min
Flavor	skórka pomarańczy	50 g	Boil	3 min

## Notes

- płatki kleikować 66 st.C - 30 min, 100 st.C - 10 min  
kleik wrzucić w temp. 68 st.C i trzymać 90 min w opadającej temperaturze do 60 st.C.  
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