

# Witbier mini 1.0

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **18**
- SRM **3.1**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13 liter(s)**
- Boil time **80 min**
- Evaporation rate **13.5 %/h**
- Boil size **17.5 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **4.4 liter(s)**
- Total mash volume **5.7 liter(s)**

## Steps

- Temp **47 C**, Time **20 min**
- Temp **53 C**, Time **20 min**
- Temp **64 C**, Time **45 min**
- Temp **73 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **4.4 liter(s)** of strike water to **51.2C**
- Add grains
- Keep mash **20 min** at **47C**
- Keep mash **20 min** at **53C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **73C**
- Keep mash **5 min** at **76C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **17.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Adjunct	Pszenica niesłodowana	1.41 kg (50.9%)	70 %	3
Temperatura kleikowania pszenicy: 58-64 °C. 20°C Zagotować i dodać do zacierania jako podgrzanie.				
Grain	Pilzneński 3,2-4,5 EBC Viking Malt	0.78 kg (28.2%)	80 %	4
Grain	Pszeniczny 3,5-6,5 EBC Viking Malt	0.37 kg (13.4%)	80 %	5
Grain	Płatki owsiane błyskawiczne	0.21 kg (7.6%)	70 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Pacific Jade	8.35 g	50 min	13.4 %
Whirlpool	Pacific Jade	4.17 g	0 min	13.4 %
Whirlpool	Perle	10.43 g	0 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Slant	104.35 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Kwas mlekowy	6.26 g	Mash	1 min
Flavor	Ananas	500 g	Boil	5 min
Spice	kolendra	7.83 g	Boil	5 min
Spice	curacao	5.22 g	Boil	5 min
Spice	Skórka pomarańczy	10.43 g	Boil	5 min
Spice	Skórka pomarańczy - suszona Kotanyi	10.43 g	Boil	5 min
Spice	Limonka	5.22 g	Boil	5 min
Spice	Skórka cytryny	7.83 g	Boil	5 min
Herb	Rumianek	0.52 g	Boil	1 min
Spice	Skórka z pomarańczy w alkoholu	20.87 g	Secondary	10 day(s)
Flavor	Ananas	500 g	Secondary	10 day(s)
Flavor	Chłodnica	1 g	Boil	15 min

## Notes

- <http://blog.homebrewing.pl/hefe-weizen-wskazowki-do-zacierania-chmielenia-fermentacji/>  
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