

# Afrykański Witbier

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **15**
- SRM **3.3**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

## Steps

- Temp **52 C**, Time **15 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **11.4 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **60 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (62.5%)	80 %	4
Grain	Słód pszeniczny Heidelberg	0.5 kg (10.4%)	82 %	3
Adjunct	Pszenica niesłodowana	1 kg (20.8%)	70 %	3
Grain	Płatki owsiane	0.3 kg (6.3%)	80 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	20 g	60 min	5 %
POCZĄTEK GOTOWANIA				
Aroma (end of boil)	PIH Blend	10 g	10 min	12 %
OSTANIE 10 MIN GOTOWANIA				

## Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's M20 Bavarian Wheat	Wheat	Dry	10 g	---
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### Extras

Type	Name	Amount	Use for	Time
Spice	kolendra	15 g	Boil	10 min
OSTANIE 10 MIN GOTOWANIA				
Spice	Curacao	15 g	Boil	10 min
OSTANIE 10 MIN GOTOWANIA				