

# Witek

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **20**
- SRM **6.3**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **44 C**, Time **15 min**
- Temp **52 C**, Time **15 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.6 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód cookie	0.5 kg (8.3%)	72 %	50
Grain	Słód monachijski typ I	1 kg (16.7%)	78 %	16
Grain	Weyermann pszeniczny jasny	2 kg (33.3%)	80 %	6
Grain	Viking Pale Ale malt	1 kg (16.7%)	80 %	5
Grain	Płatki owsiane	0.5 kg (8.3%)	85 %	3
Grain	Płatki pszeniczne	1 kg (16.7%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bulldog Bramling	30 g	60 min	7.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM41 Gwoździe i Banany	Wheat	Slant	250 ml	Fermentum Mobile
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### Extras

Type	Name	Amount	Use for	Time
Spice	skórka słodkiej pomarańczy	20 g	Boil	20 min
Spice	kolendra	20 g	Boil	12 min