

# Witek

- Gravity **12.4 BLG**
- ABV ---
- IBU **16**
- SRM **3.7**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

## Steps

- Temp **56 C**, Time **0 min**
- Temp **50 C**, Time **30 min**
- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15.3 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **0 min** at **56C**
- Keep mash **60 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt - pilznieński	2.4 kg (47.1%)	82 %	4
Grain	Viking Wheat Malt	1.2 kg (23.5%)	83 %	5
Grain	Abbey Malt Weyermann	0.1 kg (2%)	75 %	45
Grain	Płatki pszeniczne	1 kg (19.6%)	85 %	3
Grain	Płatki owsiane	0.4 kg (7.8%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	20 g	60 min	6.5 %
Aroma (end of boil)	Perle	10 g	15 min	6.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Wheat	Dry	11.5 g	fermentis

## Extras

Type	Name	Amount	Use for	Time
Spice	kolendra	30 g	Boil	10 min
Spice	słodka skórka pomarańczy	20 g	Boil	10 min
Spice	świeża skórka z 3 pomarańczy	160 g	Boil	10 min