

# Witbier

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **11**
- SRM **3.8**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **0 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **45 min** at **64C**
- Keep mash **0 min** at **72C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	3.5 kg (58.3%)	81 %	5
Grain	Pszeniczny	1 kg (16.7%)	85 %	4
Grain	Płatki pszeniczne	1 kg (16.7%)	60 %	3
Grain	Weyermann - Carapils	0.5 kg (8.3%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Szyszka lubelski	30 g	60 min	4 %
Aroma (end of boil)	Szyszka lybelski	30 g	0 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	1.5 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
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Spice	Kolendra	30 g	Boil	10 min
Flavor	Limonka zest	20 g	Boil	10 min
Flavor	Pomarańcza zest	20 g	Boil	10 min
Water Agent	Kawa mlekowy 80	30 g	Mash	60 min