

# witbire

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **17**
- SRM **3.2**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **34.9 liter(s)**

## Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **50 C**, Time **20 min**
- Temp **64 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **70 min** at **64C**
- Keep mash **10 min** at **76C**
- Sparge using **22.4 liter(s)** of **76C** water or to achieve **34.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (48%)	81 %	4
Grain	Pszenica niesłodowana	2.5 kg (40%)	75 %	3
Grain	Pszeniczny	0.5 kg (8%)	85 %	4
Grain	słód zakwaszający	0.25 kg (4%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau mittelfruh	30 g	60 min	4.9 %
Boil	Hallertau mittelfruh	20 g	30 min	4.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	1000 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	curasao	40 g	Boil	5 min

Spice	kolendra	20 g	Boil	5 min
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## Notes

- do zacieru dodane 0,5kg łuski z gryki uprzednio moczonej we wrzątku dodane na mash-out, pszenica niesłodowana kleikowana dodana po przerwie białkowej (50C),  
*Mar 28, 2017, 9:28 PM*