

## WITBIER 2.0

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **20**
- SRM **3.5**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **6 %**
- Size with trub loss **24.4 liter(s)**
- Boil time **80 min**
- Evaporation rate **13.5 %/h**
- Boil size **31.5 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.7 liter(s)**
- Total mash volume **26.2 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **19.7 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **31.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszenica niesłodowana	3.2 kg (48.9%)	70 %	2
Temperatura kleikowania pszenicy - 58-64 °C.				
Grain	Pilzneński 3,2-4,5 EBC Viking Malt	2.1 kg (32.1%)	80 %	4
Grain	Płatki owsiane błyskawiczne	0.6 kg (9.2%)	70 %	4
Grain	Enzymatyczny	0.5 kg (7.6%)	90 %	5
Grain	Łuska ryżowa sterylizowana	0.15 kg (2.3%)	1 %	1

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	8.8 %
Aroma (end of boil)	Lublin (Lubelski)	20 g	0 min	3.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM20 Białe Walonki	Wheat	Slant	200 ml	Fermentum
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	Kwas mlekowy	3 g	Mash	10 min
Spice	Ananas	1000 g	Boil	30 min
Spice	Kolendra	15 g	Boil	10 min
Spice	Curacao	20 g	Boil	10 min
Flavor	Skórki pomarańczy i cytryny moczone	70 g	Boil	5 min
Flavor	Skórka pomarańczy - suszona Kotanyi	10 g	Boil	5 min
Flavor	Limonka	100 g	Boil	5 min
Herb	Rumianek	5 g	Boil	1 min
Flavor	Skórki pomarańczy	35 g	Secondary	10 day(s)
Spice	Ananas	1000 g	Secondary	1000 day(s)
Flavor	Limonka moczona	50 g	Secondary	10 day(s)
Other	Chłodnica	1 g	Boil	15 min