

## Witbir odpadowy

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **17**
- SRM **3.8**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.2 liter(s)**
- Total mash volume **9.6 liter(s)**

### Steps

- Temp **50 C**, Time **30 min**
- Temp **67 C**, Time **60 min**
- Temp **73 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **7.2 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **73C**
- Keep mash **1 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	0.65 kg (27.1%)	80 %	4
Grain	Strzegom Pszeniczny	1 kg (41.7%)	81 %	6
Grain	Płatki pszeniczne	0.35 kg (14.6%)	85 %	3
Grain	Płatki owsiane	0.4 kg (16.7%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	7 g	60 min	10 %
Whirlpool	Hersbrucker	15 g	10 min	3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mauribrew Weiss Y1433	Wheat	Dry	12 g	---

### Extras

Type	Name	Amount	Use for	Time
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Spice	Curacao	5 g	Boil	10 min
Spice	kolendra	5 g	Boil	10 min
Spice	Curacao	10 g	Boil	0 min
Spice	kolendra	10 g	Boil	0 min