

## Białe

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **14**
- SRM **3.8**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

### Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **15.3 liter(s)** of strike water to **68.9C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód jęczmienny pilzneński	2.2 kg (49%)	80 %	3
Grain	Płatki pszeniczne	2 kg (39.2%)	80 %	4
Grain	Płatki owsiane	0.5 kg (5.9%)	80 %	3
Grain	Weyermann Monachijski typ I	0.3 kg (5.9%)	80 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	20 g	60 min	5.5 %
Boil	Saaz (Czech Republic)	15 g	10 min	3.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
SafAle K-97	Ale	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
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Spice	Suszona skórka słodkiej pomarańczy	15 g	Boil	5 min
Spice	Curaçao	10 g	Boil	5 min
Spice	Kolendra Indyjska	6 g	Boil	5 min
Other	Glukoza	160 g	Bottling	---