

## Przepis 4

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **23**
- SRM **5.4**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **7 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

### Mash information

- Mash efficiency **92 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

### Steps

- Temp **55 C**, Time **20 min**
- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **14.4 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **90 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.2 kg (25%)	80 %	4
Grain	Viking Pale Ale malt	1.5 kg (31.3%)	80 %	5
Grain	Strzegom Monachijski typ II	0.9 kg (18.8%)	79 %	22
Grain	Strzegom Wiedeński	1.2 kg (25%)	79 %	10
Grain	Pszenica niesłodowana	0 kg	75 %	3
Grain	Płatki owsiane	0 kg	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	15 g	60 min	8.9 %
Aroma (end of boil)	Oktawia	15 g	20 min	7.1 %
Aroma (end of boil)	Sybilla	15 g	20 min	3.5 %
Whirlpool	Perle	15 g	0 min	7 %
Whirlpool	Puławski	15 g	0 min	4.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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US-05	Lager	Slant	18.18 ml	---
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