

## Bez czelna

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **28**
- SRM **4.1**
- Style **Fruit Beer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.15 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.4 liter(s)**

### Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **17 liter(s)** of strike water to **72.1C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (46.3%)	80 %	5
Grain	Pszeniczny	1 kg (18.5%)	85 %	4
Grain	Pilznieński	0.5 kg (9.3%)	81 %	4
Grain	Pszeniczny	1.4 kg (25.9%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	8.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
S-04	Ale	Slant	30 ml	---
Biotyk	Ale	Culture	15 g	---

### Extras

Type	Name	Amount	Use for	Time
Flavor	Bez	1.5 g	Boil	1 min