

## Ostatnie BW-20 11.06.2024r

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **43**
- SRM **5.6**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **25 %/h**
- Boil size **32.3 liter(s)**

### Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **21.4 liter(s)**

### Steps

- Temp **63 C**, Time **20 min**
- Temp **67 C**, Time **40 min**
- Temp **73 C**, Time **10 min**

### Mash step by step

- Heat up **16.6 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **67C**
- Keep mash **10 min** at **73C**
- Sparge using **20.5 liter(s)** of **76C** water or to achieve **32.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	2.5 kg (52.6%)	80 %	5
Grain	Pszeniczny	0.5 kg (10.5%)	85 %	4
Grain	Smoked Malt	1 kg (21.1%)	80 %	18
Grain	Monachijski typ II	0.75 kg (15.8%)	79 %	22

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	20 g	60 min	17 %
Aroma (end of boil)	Oktawia	30 g	10 min	7 %
Aroma (end of boil)	Styrian Dragon	10 g	5 min	8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis SafAle BW-20	Ale	Slant	200 ml	---

### Extras

Type	Name	Amount	Use for	Time
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Fining	Whirlfloc T	1 g	Boil	5 min
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