

## Portierów dwóch.

- Gravity **20 BLG**
- ABV **8.8 %**
- IBU **43**
- SRM **22.1**
- Style **Baltic Porter**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **100 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.2 liter(s)**
- Total mash volume **33.6 liter(s)**

### Steps

- Temp **50 C**, Time **10 min**
- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **25.2 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **50 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (35.7%)	80 %	4
Grain	Strzegom Monachijski typ II	2 kg (23.8%)	79 %	22
Grain	Strzegom Wiedeński	1.7 kg (20.2%)	79 %	10
Grain	Viking Pale Ale malt	0.7 kg (8.3%)	80 %	5
Grain	Weyermann Caramunich 3	0.3 kg (3.6%)	76 %	150
Grain	Caramunich® typ I	0.3 kg (3.6%)	73 %	80
Grain	Special B Malt	0.2 kg (2.4%)	65.2 %	100
Grain	Jęczmień palony	0.2 kg (2.4%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	30 g	60 min	15.5 %
Boil	Lublin (Lubelski)	25 g	20 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM30 Bohemska rapsodia	Lager	Slant	500 ml	Fermentum Mobile
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