

Porter

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **32**
- SRM **23**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **26.3 liter(s)**
- Total mash volume **36.8 liter(s)**

Steps

- Temp **62 C**, Time **90 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **30 min**

Mash step by step

- Heat up **26.3 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **90 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **30 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	4 kg (38.1%)	81 %	4
Grain	Monachijski	2 kg (19%)	80 %	16
Grain	Strzegom Monachijski typ II	2 kg (19%)	79 %	22
Grain	Strzegom Wiedeński	1 kg (9.5%)	79 %	10
Grain	Weyermann - Dehusked Carafo III	0.25 kg (2.4%)	70 %	1024
Grain	Caraaroma	0.25 kg (2.4%)	78 %	400
Grain	Płatki owsiane	1 kg (9.5%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	60 g	60 min	7.3 %
Boil	Lubelski	30 g	10 min	5.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Saflager W 34/70	Lager	Slant	600 ml	Fermentis
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