

- Gravity **23.6 BLG**
- ABV **10.8 %**
- IBU **35**
- SRM **34.9**
- 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 **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **87 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.5 liter(s)**
- Total mash volume **31.3 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **73 C**, Time **30 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **23.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **73C**
- Keep mash **2 min** at **78C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	2.5 kg (30.4%)	79 %	16
Grain	Pilzneński	1.4 kg (17%)	81 %	4
Grain	Carafa II	0.33 kg (4%)	70 %	812
Grain	Płatki owsiane	0.5 kg (6.1%)	85 %	3
Sugar	Brown Sugar, Dark	0.4 kg (4.9%)	100 %	99
Grain	Strzegom Wiedeński	1.25 kg (15.2%)	79 %	10
Grain	Weyermann - Carafa III	0.2 kg (2.4%)	70 %	1024
Grain	Viking Pale Ale malt	1.45 kg (17.6%)	80 %	5
Grain	Weyermann - Carafa I	0.2 kg (2.4%)	70 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	60 min	10 %
Boil	Lublin (Lubelski)	40 g	20 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Bohemian Lager	Lager	Liquid	400 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
Water Agent	kwask mlekowy	15 g	Mash	---
Other	łuska ryżowa	200 g	Mash	10 min