

Pierwszy niby porter

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **27**
- SRM **33.8**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **69 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.7 kg (67.3%)	80 %	5
Grain	Monachijski	1 kg (18.2%)	80 %	16
Grain	Strzegom Czekoladowy ciemny	0.2 kg (3.6%)	68 %	1200
Grain	Płatki owsiane	0.2 kg (3.6%)	60 %	3
Grain	Strzegom Karmel 600	0.4 kg (7.3%)	68 %	601

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	25 g	60 min	8.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Fermentis