

Zwykły kierunek

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **39**
- SRM **35.1**
- Style **Foreign Extra Stout**

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 **15 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

Steps

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

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	5.5 kg (79.7%)	81 %	5
Grain	Bestmalz Red X	0.6 kg (8.7%)	79 %	30
Grain	Jęczmień palony	0.8 kg (11.6%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	25 g	60 min	12.4 %
Boil	Fuggles	90 g	10 min	4.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP001 - California Ale Yeast	Ale	Slant	200 ml	White Labs