

Porter Angielski

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **22**
- SRM **19.9**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.7 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **17.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.6 kg (90%)	80 %	5
Grain	Caraaroma	0.3 kg (7.5%)	78 %	400
Grain	Carafa II	0.1 kg (2.5%)	70 %	812

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	15 g	55 min	7 %
Boil	Golding	30 g	5 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis