

## English Porter #4

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **23**
- SRM **21**
- Style **Brown Porter**

### Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.4 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**

### Mash step by step

- Heat up **16.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (56.1%)	80 %	5
Grain	Monachijski typ II 20-25 EBC Weyermann	1.5 kg (28%)	80 %	20
Grain	Caraaroma	0.1 kg (1.9%)	78 %	400
Grain	Weyermann Specjal W	0.4 kg (7.5%)	68 %	300
Grain	Cara Gold Castlemalting	0.2 kg (3.7%)	78 %	120
Grain	Carafa III	0.15 kg (2.8%)	70 %	1034

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	18 g	60 min	13 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Fermentis