

## English Porter #7

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- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **22**
- SRM **23.9**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

### Steps

- Temp **65 C**, Time **75 min**

### Mash step by step

- Heat up **15.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **75 min** at **65C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	4 kg (76.2%)	81 %	6
Grain	Strzegom Bursztynowy	0.5 kg (9.5%)	70 %	49
Grain	Caraamber	0.2 kg (3.8%)	75 %	59
Grain	Carafa	0.075 kg (1.4%)	70 %	664
Grain	Carafa III	0.075 kg (1.4%)	70 %	1034
Grain	Weyermann - Chocolate Wheat	0.2 kg (3.8%)	74 %	788
Grain	Fawcett - Pale Chocolate	0.2 kg (3.8%)	71 %	600

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	50 min	7.6 %
Aroma (end of boil)	Fuggles	50 g	0 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 1450	Ale	Slant	200 ml	Wyeast